CALIFORNIA DEPARTMENT OF CORRECTIONS & REHABILITATION PAROLE LEADS MODERNIZATION REQUEST FOR PROPOSAL RFP CDCR – 5225-103

Appendix A, Attachment 2

STATEMENT OF WORK

#### A. INTRODUCTION

This Statement of Work (SOW) defines the activities, responsibilities, deliverables, and acceptance process and criteria for providing the Parole Law Enforcement Automated Data System (LEADS) Modernization Project (PLM) to the California Department of Corrections & Rehabilitation (CDCR).

This award is being made under the provisions of Public Contract Code Section 12125 et seq., the Alternative Protest Process, providing for award while under protest. Under the terms of this contract, the State reserves the right to terminate the contract for convenience.

#### B. STATEMENT OF WORK

#### SUMMARY OF PROJECT

This solution will manage, update, and integrate parolee data into its business processes in order to:

- Increase the effectiveness of managing the parolee population;
- Improve the timeliness of data to Law Enforcement Agencies (LEAs) to realtime updates of Parole LEADS data from its source system (CalParole);
- Implement the additional functionality requested by the LEAs to improve both strategic and tactical use by improving data quality and currency, deliver data to various devices (i.e., patrol cars, desktops, laptops, PDAs, and other wireless devices);
- Improve security administration and monitoring that will allow CDCR central security administration to monitor the system for unauthorized access, inappropriate usage, dormant users, system audits, and usage reporting (to identify peaks and low usage to better schedule system maintenance and backups);
- Improve and modernize the technical infrastructure to ensure the system is stable, supportable, scaleable, and easily maintainable.

This solution includes requirements definition and traceability, design, development, testing, implementation, and maintenance. Maintenance will be at the option of CDCR.

- 1.1 Project Scope: The scope of this project is as follows:
- Enhance the current primary data source application (CalParole);
- Replace the current outdated Parole Law Enforcement Automation Data System (Parole LEADS) application;
- Develop a web-based Training/Testing and Account Management system;
- Act as a Systems Integrator (SI) to build the necessary interfaces to share parolee data, address validation from the United State Postal Service (USPS), and Geo-mapping functionality from CalParole to LEAs;
- Integrate Parole LEADS with CalParole including the following:

- CalParole Address validation against the USPS and incorporate;
  - All photos and associated text from the Parole LEADS database into CalParole;
  - Mapping functionality that currently exists in Parole LEADS.
- Web Site Replace current Parole LEADS web site functionality and presentation capabilities;
- Web Services Provide a method to render the Parole LEADS information in a format that allows LEAs access to this data via a transactional query;
- Mobile version of web site –include a secondary option for delivery of parolee information for laptops, PDA's and other mobile devices;
- De-centralize and simplify Accounts Management and Security Auditing.
- 1.2 Contract Duration is referenced on the STD 213.

#### 2. POINTS OF CONTACT

The State Point of Contact for this SOW is:

Name: (Will be completed at Contract Award)
Title: (Will be completed at Contract Award)
Phone Number: (Will be completed at Contract Award)
FAX Number: (Will be completed at Contract Award)
E-Mail: (Will be completed at Contract Award)

The Contract Point of Contact for this SOW is (Contractor to fill in information below)

Name:

Title:

Phone Number: FAX Number:

E-Mail:

## 3. PERIODS OF PERFORMANCE

Contractor staff must be on site at 1920 Alabama Avenue, Rancho Cordova, CA 95742 for the term of this contract.

The following table represents the Project Phases & Payment Schedule:

Maximum Percentage Payment		
Project Phase	Software Costs	One-Time Deliverables & Services
Ongoing During Project	0%	0%
Project Planning	10%	10%
Requirements Definition & Design	10%	20%
Customization & Testing	0%	10%
Environment Preparation	0%	10%
Documentation, Training & <u>Software</u> Acceptance	70%	<del>10</del> <u>20</u> %
Deployment	0%	10%
Transition to CDCR Support & Solution Acceptance	10%	20%

Post Implementation	Annual Maintenance Fee for Software & Ongoing Deliverables & Services
Maintenance and Ongoing Support	100%
CDCR Requisitioned Enhancement / Modification	100% Payment of Each, CDCR Approved, Change, Enhancement and/or Modification Task.

<sup>&</sup>quot;Acceptance" defines the end of a major level of effort.

The phase "Documentation, Training & <u>Software</u> Acceptance" identifies the completion of integration efforts. This reference to acceptance marks the completion of project planning, analysis & design, customization & testing, environment preparation, documentation, training and user acceptance testing. The product has been fully evaluated in a non-production

environment and users have formally agreed that the system is ready for pilot testing in a Law Enforcement Agency (LEA) setting.

The phase "Transition to CDCR Support & <u>Solution</u> Acceptance" designates the end of Pilot operations, the completed roll-out of the solution to CDCR and LEA end users statewide, the completion of one-time project activities, and transition to CDCR staff.

If the State invokes the maintenance option, the calendar day following "Solution Acceptance" marks the first day of first year of the Maintenance and Ongoing Support Phase

(1) Ongoing During Project	(Contractor to fill in information below)
START DATE	
END DATE	
	actor to fill in information below)
START DATE	
END DATE	
(3)Requirements Definition	& Design (Contractor to fill in information below)
START DATE	
END DATE	
3.7	(Contractor to fill in information below)
START DATE	
END DATE	
(5) F : ( ) D ::	(0 , , , , (11) )
<u>`                                    </u>	n (Contractor to fill in information below)
START DATE	
END DATE	
• •	g & Software Acceptance (Contractor to fill in
information below)	
START DATE	
END DATE	
(7) Depley ment (Contractor	to fill in information below
(7) Deployment (Contractor START DATE	to till in information below)
END DATE	
END DATE	
(8) Transition to CDCR	Support & Solution Acceptance (Contractor to fill in
information below)	Capport a <u>Colditori</u> Acceptance (Contractor to IIII II
START DATE	
END DATE	

(9) Maintenance & Ongoing Support (At option of the State) (Contractor to fill in information below)

START DATE	
END DATE	

#### 4. STATE OF CALIFORNIA FURNISHED ITEMS

- 4.1 Through "Transition to CDCR Support & <u>Solution</u> Acceptance" Phase, the State of California will provide:
  - Desk space, telephones, and office supplies for up to 5 persons. Although the State <u>may</u> be able to accommodate additional workspace, any additional provisions for workspace or offices will be the responsibility of the Contractor;
  - The CDCR Technical Project Manager (TPM) to serve as liaison between CDCR and the Contractor;
  - CDCR and LEA Subject Matter Experts to support the Contractor in understanding the requirements, data and CDCR business and technical environment:
  - Independent Project Oversight and Independent Verification and Validation;
  - Feedback on project deliverables;
  - Access to business and technical subject matter and existing documentation;
  - Technical environment information and standards.

#### 5. CONTRACTOR DELIVERABLES & SERVICES REQUIREMENTS

For each deliverable that specifically requests such, a deliverable expectation document (DED) will be prepared for review, discussion, and approval by CDCR utilizing the CDCR's PMO Templates, found within this document. All deliverables will be based on the applicable PMO Templates and standards from the Institute of Electrical and Electronic Engineers (IEEE), the Project Management Institute (PMI) or other recognized standards. The DED will enable the Contractor and CDCR to agree to the level of detail for each deliverable and set expectations prior to submission of the draft deliverable.

### 5.1 Ongoing During Project

5.1.1 Unanticipated Tasks (Rgmt ID# DA-01)

The Contractor is responsible for full implementation support for all tasks defined herein or unanticipated (to be defined when they are determined to be required).

Through the approved change control process, the Contractor is to provide CDCR with two thousand (2,000) hours of unanticipated task hours (not to exceed 10% of the total contract cost) for non-contract identified/required modifications or other changes in code through solution implementation. These hours shall be used at the discretion of, and only with prior written approval from the CDCR Project Managers.

Contractor must ensure all software to function with requested modifications or other changes in code, etc., and that any software bugs or logic problems found before and during the acceptance period be fixed for free.

# 5.2 Project Planning

## 5.2.1 Documentation Tools (Rgmt ID# D-01)

All documentation must be produced using the Microsoft® Office Suite and provided to the CDCR Project Team in electronic and hardcopy formats.

## 5.2.2 Project Management Planning (Rqmt ID# D-02)

In accordance with the Project Management Institute (PMI) Standards and other best practices, the Contractor is responsible for writing, revising and delivering, the following project management planning documents to merge methodologies and practices with established project methodologies and practices:

- Communication Management Plan;
- Risk Management Plan:
- · Configuration Management Plan;
- Scope Management Plan;
- Change Control Plan;
- · Schedule Management Plan;
- Bi-Weekly Status Reports;
- Issue and Risk Escalation Plan;
- Project Schedule;
- Quality Management Plan;
- Quality Assurance Plan.

In addition to the development of the project management planning documents, all established methodologies and practices must be followed.

# 5.3 REQUIREMENTS DEFINITION & DESIGN

5.3.1 Conversion Specifications & Requirements (Rgmt ID# C-01)

The Contractor must provide documented and detailed requirements definition in the form of a Requirements Traceability Matrix (RTM), design specification and conversion specifications and requirements. At a minimum the following will be delivered:

- Deliverable Expectation Document (DED) for Conversion Specifications and Requirements;
- Requirements Traceability Matrix (RTM);
- Conversion Specifications and Requirements.

# 5.3.2 Data Conversion Procedures (Rqmt ID# C-02)

Document and deliver to the CDCR Project Managers data conversion procedures, expected conversion results, and actual results. If there is a difference between expected results and actual results the Contractor will investigate and implement required reconciliation and remediation activities. The Contractor must document conversion procedures and conversion results. At a minimum the following must be delivered:

- Conversion Test Procedures:
- Conversion Test Results:
- Conversion Test Summary Report.
- 5.3.3 Identification of Data that Needs to be Converted (Rqmt ID# C-03)
  Assist CDCR with the identification of the specific data that needs to be converted.

### 5.3.4 Conversion Methodology (Rgmt ID# C-04)

Document and deliver conversion methodology and plans that will be customized to meet the specific needs of the CDCR environment and project. At a minimum the following must be delivered:

• Conversion Test Plan.

## 5.3.5 Requirements Verification & Analysis (Rqmt ID# IP-01)

Complete requirements verification and analysis. In addition to other tasks believed to be required for the successful implementation of the required solution, the following must be completed:

- Evaluate current business environment:
- Perform and document an evaluative comparison between the current business environment and the solution-prescribed environment;
- Work with project subject matter experts and document detailed operational procedures, for each functional organization, to be used by operational units in the completion of their duties through use of the solution:
- Evaluate and confirm Technical Requirements;

- Evaluate and confirm Business Requirements;
- Complete and document a Gap/Fit Analysis;
- Complete System Requirements Specification document;
- Complete a Requirements Traceability Matrix (RTM) to ensure that all detailed requirements are traceable in both directions through all phases of the project.

## 5.3.6 Implementation & Integration Plan (Rqmt ID# IP-03)

In addition to other tasks believed to be required for the successful implementation of the required solution, the following must be completed:

- Develop a comprehensive solution Implementation and Integration Plan:
- Complete an analysis to ensure hardware, operating system, and desktop environments shall satisfy the productive use of the solution;
- Complete an analysis to ensure the productive use of the final PLM solution must be available for LEA users in a wireless environment;
- Complete an equipment analysis to ensure hardware infrastructure is appropriately established, tested and prepared for solution implementation and production processing;
- Complete comprehensive interface analysis to ensure a complete understanding of the technical interfaces that must be developed, tested and implemented to pass data between the solution and external sources;
- Complete comprehensive solution deployment study to identify the optimal roll-out methodology for solution functionality deployment.

### 5.3.7 Bandwidth Needs Assessment (Rgmt ID# N-01)

Complete a bandwidth needs assessment that must identify the bandwidth requirements between components of the internal CDCR network and between CDCR and the internet. This assessment must be completed within nine (9) months following final contract approval.

## 5.4 CUSTOMIZATION & TESTING

## 5.4.1 Creation of Test Cases (Rqmt ID# T-01)

Create and deliver appropriate and comprehensive test cases for each required test during the testing phase (Integration, System, Load/Performance and User Acceptance Tests). Test cases will be traceable to the original requirements defined in the Requirements Traceability Matrix. At a minimum the following must be delivered:

- Load/Performance Test Cases;
- System Test Cases;

- Integration Test Cases;
- User Acceptance Test Cases.

### 5.4.2 Defect Tracking (Rgmt ID# T-02)

Contractor must provide and use a defect tracking process during the testing phase. This defect tracking process must be in accordance with the approved Testing Plan and associated procedures. The defect tracking process must minimally include:

- Specific description of the defect;
- Functionality impacted by the defect;
- Test case which identified the defect;
- Defect classification;
- Date defect was identified;
- Defect owner;
- Date the defect is to be resolved:
- Re-test results;
- Date of retest;
- Resolution description;
- Conclusion;
- Action Plan Description;
- Action Plan Owner.

### 5.4.3 Software Upgrades Require Impact Evaluation (Rgmt ID# T-03)

The Contractor is responsible for completing, documenting and providing a software upgrade impact evaluation walk-through prior to implementation at CDCR. The impact evaluation will be performed by the Contractor and approved by CDCR.

## 5.4.4 Creation of Test Data (Rqmt ID# T-04)

With the assistance of CDCR, the Contractor must identify or create comprehensive and appropriate test data to support stress testing and CDCR Software Acceptance.

The Contractor must support PLM solution development and testing by providing database refreshes, backups and restores as required throughout the PLM project life-cycle.

### 5.4.5 Test Execution (Rgmt ID# T-05)

With the assistance of CDCR, the Contractor must run tests with valid and invalid data. The purpose of testing with valid and invalid data is to ensure the solution responds appropriately to input and interface data. At a minimum the following must be delivered:

System Test Results;

- Integration Test Results;
- User Acceptance Test Results;
- Stress Test Results.

## 5.4.6 Test Procedures, Plans and Scripts (Rqmt ID# T-06)

Provide test procedures, plans, and scripts that must be used for Integration Testing, User Acceptance Testing (UAT), and System Testing. At a minimum the following must be delivered:

- Test and Evaluation Master Plan;
- System Test Plan;
- UAT Test Plan;
- Integration Test Plan;
- System Test Procedures;
- UAT Test Procedures;
- Integration Test Procedures;
- System Test Scripts;
- UAT Test Scripts;
- Integration Test Scripts;
- System Test Summary Report;
- UAT Test Summary Report;
- Integration Test Summary Report;
- Test Summary Report.

# 5.4.7 Interface Analysis & Integration (Rqmt ID# IS-03)

Responsible for a comprehensive Interface Analysis and Integration Plan.

In addition to other tasks believed to be required for the successful implementation of required interfaces, the following must be completed:

- Evaluate interface requirements:
- · Identify optimal interface approach;
- Interface Test Plan;
- Interface Test Procedures:
- Interface Test Cases;
- Develop, test, and implement interfaces;
- Validate interfaces;
- Interface Test Results;
- Interface Test Summary Report.

#### 5.5 ENVIRONMENT PREPARATION

### 5.5.1 Technical Specifications (Rqmt ID# D-07)

Provide hardware and software technical specifications (i.e., web server, application server, and database server(s) configuration). (Note: The CDCR shall provide the resources to host the system solution.)

### 5.5.2 Data Conversion (Rqmt ID# C-05)

Responsible for all required conversion related activities.

Responsible for the completion of conversion planning, execution and validation. In addition to other tasks believed to be required for the successful conversion of historic data, the following must be completed:

- Evaluate data requirements;
- Create and test conversion scripts;
- Conversion test Cases;
- Convert data:
- Validate converted data:
- Conversion Test Results;
- Conversion Test Summary Report;
- Import validated data into new system.

# 5.5.3 Initial Implementation Test Environment (Rqmt ID# T-07)

Responsible a testing environment (consisting of hardware, operating system, software, and configured to reflect production) for all aspects of system, integration, interface, acceptance, and stress testing prior to the initial implementation and roll-out.

## 5.5.4 Post-Implementation Test Environment (Rgmt ID# T-08)

Responsible for the establishment and configuration of, a CDCR acquired and housed, test environment that must allow for comprehensive testing prior to deployment of new feature releases and other changes in the software to production.

## 5.5.5 Operational Transition Analysis (Rqmt ID# IP-02)

Responsible for the completion and delivery of a comprehensive Operational Transition Analysis. In addition to other tasks believed to be required for the successful user adoption of the solution, the following must be completed:

- Complete a comprehensive operational transition review;
- Develop operational transition plans and procedures which identify business process integration.

### 5.5.6 System Work-Around Processes (Rgmt ID# CNP-01)

Include work-around processes to ensure PLM data remains available to LEAs in case there is a database system failure. This is part of contingency planning and in no way reduces or eliminates responsibility and liability associated with the uptime requirement.

# 5.5.7 Contingency Planning for Critical Business Processes (Rqmt ID# CNP-02)

Include work-around processes to ensure business-critical functionality continues in the event of temporary one (1) hour to thirty (30) calendar days disruption in one (1) or more aspects of the technical solution (e.g., failure of hardware, network, application software, and database). This plan must include documented operational procedures written so that business resumption can be achieved in a timely and orderly manner.

In addition, the Contingency Plan must include a mutually agreeable prioritization for the recovery of critical applications. At a minimum the following must be delivered:

• Contingency Plan for Critical Business Processes.

### 5.5.8 Operational Recovery Planning (Rqmt ID# CNP-03)

Complete an Operational Recovery Plan describing specific procedures for how the PLM application would be recovered after a disaster. At a minimum the following must be delivered:

· Operational Recovery Plan.

## 5.5.9 Technical Elements for Disaster Recovery (Rgmt ID# CNP-04)

Provide all system information and files needed to recover the PLM application in the event of a disaster such as: recovery strategy/implementation plan, system documentation (including scripts), and an inventory of the data files and tables necessary for the operation of the application. At a minimum the following must be delivered:

• Disaster Recovery Technical Specifications.

### 5.5.10 Disaster Recovery Environment (Rgmt ID# CNP-05)

Propose the hardware configuration required for operational recovery as it may be the same or different than the production system.

## 5.5.11 Validation Tools & Processes (Rgmt ID# IS-06)

Establish validation tools and processes to support both on-line and batch processing.

## 5.6 DOCUMENTATION, TRAINING AND SOFTWARE ACCEPTANCE

## 5.6.1 Functional Documentation (Rgmt ID# D-03)

Provide comprehensive functional and user documentation, including:

- Comprehensive User Operating Instructions, customized to CDCR's user environment:
- System documentation including graphic and narrative overviews;
- System Screen Flow Diagrams;
- Glossary of system terms & acronyms;
- User documentation;
- Available Reports and associated Report Descriptions;
- Documentation for each screen.

The documentation must be presented in the following format:

- Five (5) complete sets of Hard Copy with license to reproduce additional copies for CDCR's exclusive usage;
- Five (5) complete sets of documentation on separate Compact Disks, in PDF format with license to distribute for CDCR exclusive usage;
- Five (5) complete sets of documentation on separate Compact Disks, in Microsoft Office Suite® format with license to revise and distribute for CDCR's exclusive purposes.

## 5.6.2 General Technical Documentation (Rgmt ID# D-04)

Provide comprehensive general technical documentation, including:

- Design documents;
- Entity Relationship Diagrams (ERD);
- Physical & Logical Data Flow Diagrams;
- Data dictionary;
- Maintenance Procedures & Processes;
- Responsibility matrix;
- System interfaces.

#### 5.6.3 Detailed Technical Documentation (Rgmt ID# D-05)

Provide comprehensive detailed technical documentation, including:

- Comprehensive Technical Operations Documentation, customized to CDCR's environment;
- Configuration Documentation;
- Installation Instructions:
- Implementation Plans;
- Start-up / Shut down procedures;
- Backup, Recovery and Restoration of application system and server data and files (includes Operational Recovery);

- Server Hardware and Software Technical Specifications and Configuration;
- Patch Management;
- Batch processing details;
- De-centralized Accounts Management Plan;
- Security Management Plan (specific to the PLM web application development process, systems, network, wireless network, and user authorization, authentication and access);
- Security Administration and Auditing Plan for post-implementation production;
- Back-up and recovery scripts and procedures;
- Detailed procedures to perform incremental, differential, and full backup/recovery operations in order to ensure project continuity (during implementation) and business continuity (during postimplementation operations);
- Help Desk Triage & Troubleshooting documentation;
- Error messages & Error correction procedures;
- Technical Troubleshooting Documentation;
- Steps required to migrate software from test to production environments;
- Logical and physical data model in ErWin or compatible format.

### 5.6.4 Operational Procedures (Rgmt ID# D-06)

The following operational procedures, specifically customized for CDCR must be completed:

- Operational Support Plan;
- Solution and Data Migration Plan;
- Test Procedures;
- Disaster Recovery Plan;
- Business Continuity and Resumption Planning.

### 5.6.5 User & Technical Training (Rgmt ID# TRG-01)

The Contractor is responsible for the completion and delivery of a comprehensive hands-on user and technical training plan. In addition to other tasks believed to be required for the successful training of users and technical support staff, the following activities must be completed:

- Identify training methodology to meet the needs of CDCR business environment, technical environment and solution;
- Create and execute training plan:
  - o Fully train users in CDCR operational use of solution;
  - o Fully train technical staff in solution support;
  - Complete comprehensive technical knowledge transfer to CDCR technical staff;

 Ensure complete and successful knowledge transfer and technical training to CDCR staff for system and database administration tasks.

- 5.6.6 Training & Management Documentation (Rqmt ID# TRG-02)

  Contractor must provide comprehensive Training & Management documentation, including:
  - Training Plans, Training Manuals and other user and technical documentation that must be used for training of CDCR business and technical staff;
  - Contractor procedures for Software Quality Assurance and Quality Control:
  - Technical documentation and knowledge transfer materials for use in training technical staff to support the system, including Centralized Accounts Management Plan and Security Auditing.
- 5.6.7 Maximum Response Times for Issue Resolution (Rqmt ID# HDS-02)
  Support and maintenance procedures must define maximum response times for issue resolution.
- 5.6.8 Quick Reference Card (Rqmt ID# HDS-06) Provide a Quick Reference Card to assist users. To be completed one (1) month before Technical Training.
- 5.6.9 Response Times and Escalation Process (Rqmt ID# HDS-07) Propose average response time and escalation processes for responses to solution issues.

#### 5.7 DEPLOYMENT

- 5.7.1 General Contractor Responsibilities (Rqmt ID# IS-04) Responsible for all aspects associated with:
  - Successfully customizing the solution to ensure it meets CDCR's business and technical requirements;
  - Testing the solution to ensure it is bug and design-flaw free;
  - Integrating the solution with all required interfaces;
  - Integrating the solution within CDCR's technical environment;
  - Fully supporting user acceptance testing to ensure it satisfies user requirements;
  - Ensure the system is fully stable;
  - Cutover to production and deploy solution to users based on the deployment plan approved by CDCR;

All responsibilities of the sub-contractors.

### 5.8 TRANSITION TO CDCR SUPPORT AND SOLUTION ACCEPTANCE

### 5.8.1 Contractor Implementation Team (Rgmt ID# HDS-03)

Provide an on-site implementation, roll-out and transition support team with the appropriate skills, experience and in the sufficient quantity to successfully manage and support all implementation, roll-out and transition of support functions to CDCR resources.

## 5.8.2 On-Site Contractor Team (Rqmt ID# IS-01)

Responsible for the planning, specification, development, testing, user training, and implementation of the solution at CDCR. Provide an onsite (Aerojet, Rancho Cordova) team to support this effort.

## 5.8.3 Full Deployment of Solution (Rgmt ID# IS-02)

Responsible for the successful deployment of the solution at the CDCR data center in accordance with approved deployment documents.

# 5.8.4 Full Support through Transition to CDCR (Rqmt ID# IS-05)

Responsible for fully supporting the solution until the solution is fully functional in a production environment with no critical processing errors occurring within a period of thirty (30) sequential calendar days and technical knowledge transfer is complete.

#### 5.9 MAINTENANCE AND ONGOING SUPPORT

#### 5.9.1 Contractor Team (Rgmt ID# HDS-01)

Provide help desk support staff that have a comprehensive understanding of the solution deployed at CDCR and a comprehensive understanding of how CDCR is utilizing the solution (as defined in the Operational Procedures identified in the attached Integration Planning requirements).

Help desk support must be accessible twenty-four (24) hours a day, seven (7) days a week, 365 days per year.

#### 5.9.2 Toll Free Help Desk Support (Rgmt ID# HDS-04)

A toll free number must be provided for help desk calls.

5.9.3 Twenty-four (24) Hour Technical Support (Rqmt ID# HDS-05)

Provide 24-hour technical support to CDCR Technical staff, for troubleshooting technical issues and their resolution that have been escalated by a CDCR Technical Lead, Supervisor or Manager.

5.9.4 Web-enabled Help Desk Support (Rqmt ID# HDS-08)

Provide help desk related support through the use of web-enabled and electronically searchable frequently asked questions (FAQs).

The frequently asked questions FAQ tool must be regularly updated (at least weekly for the first six (6) months following roll-out and at least monthly for the remaining term of the contract, including optional maintenance if applicable).

5.9.5 Full Contractor Upgrade & Enhancement Support through use of 3,000 Hours (Rgmt ID# PI-01)

Responsible for full implementation support for all solution upgrades, modifications, enhancements, or other changes in code during the term of the contract.

Through the approved change control process, provide CDCR with three thousand (3,000) hours in upgrades, modifications, enhancements, or other changes in code throughout the duration of the contract. These hours shall be used at the discretion of, and only with prior written approval from the CDCR Project Managers.

CDCR requires all software to function with the new version of the operating systems, database management systems, etc. and that any software bugs or logic problems found before and during the acceptance period be fixed for free.

5.9.6 Contractor Responsibility for Changes in Application Software (Rqmt ID# PI-02)

Responsible for the requirements, design, development, maintenance, testing, user and technical staff training, and documentation revisions for approved enhancements and other changes in the application software.

5.9.7 Contractor Responsibility for Issue Resolution (Rqmt ID# PI-03)
Responsible for troubleshooting, tracking and resolution of all solution related issues for the term of the contract.

# 5.9.8 CDCR has Rights to Solution through Perpetual Licensing (Rgmt ID# PI-04)

Grant the CDCR full license to solution in perpetuity. Perpetual license grants CDCR full use of solution for an unlimited number of users. As long as CDCR has a current agreement in place, all regular product upgrades must be provided at no cost. With the exception of CDCR's willful termination of the current agreement, all upgrades must be provided and installed within six (6) months of the enhancements first being made available to any other customer.

# 5.9.9 Post Implementation: On-site DBA Support (Rqmt ID# PS-01a)

Following the production implementation and roll-out of the solution, CDCR may require assistance in the production support of the solution. It shall be necessary for support staff to be co-located with CDCR business and/or technical staff. Staff are required to be onsite at 1920 Alabama Avenue, Rancho Cordova, CA 95742; between the hours of 7:00 am and 5:00 pm. All per diem and associated travel costs are included in the total PLM solution cost. All staff must be dedicated full time to CDCR and must complete tasks as assigned by CDCR.

The resource must have a firm understanding of, and capable of supporting, the solution installed at CDCR.

CDCR shall provide work space, desktop computing, telephone, e-mail and other working environment essentials similar to that which shall be provided to the implementation team. Responsible for ongoing training and other responsibilities associated with the employee and employer relationship.

Position: <u>Database Administrator (DBA)</u> to support, maintain, manage the databases and perform other DBA related duties and responsibilities. This person must work closely with the System Administrator to ensure the solution and supporting environment is properly tuned and managed to ensure it performs its proper functions in an efficient manner.

# 5.9.10 Post Implementation: On-site System Administrator Support (Rgmt ID# PS-01b)

Following the production implementation and roll-out of the solution, CDCR may require assistance in the production support of the solution. It shall be necessary for support staff to be co-located with CDCR business and/or technical staff. Staff are required to be onsite at 1920 Alabama Avenue, Rancho Cordova, CA 95742; between the hours of 7:00 am and 5:00 pm. All per diem and associated travel costs are

included in the total PLM solution cost. All staff must be dedicated full time to CDCR and must complete tasks as assigned by CDCR.

The resource must have a firm understanding of, and capable of supporting, the solution installed at CDCR.

CDCR shall provide work space, desktop computing, telephone, e-mail and other working environment essentials similar to that which shall be provided to the implementation team. Responsible for ongoing training and other responsibilities associated with the employee and employer relationship.

Position: <u>System Administrator</u> to provide high functioning technical, administrative and programmatic duties. This person must work closely with the DBA to ensure the solution and supporting environment is properly tuned and managed to ensure it performs its proper functions in an efficient manner.

### 5.9.12 Source Code Agreement

All COTS/MOTS proprietary solution source code for the operations and maintenance of the PLM must be placed in an independent and commercially available escrow account, funded by the Contractor, located in the United States of America during the design, development, and implementation and acceptance phases. The source code in escrow must be available for State inspection at any time and kept current (within thirty (30) calendar days of productive use) by refreshing the source code in conjunction with software enhancements or new product releases.

### 6. FORMAL STATE ACCEPTANCE

The following process will be used for State acceptance of written deliverables.

- a. The State will accept written deliverables in accordance with those standards approved prior to initiation of the deliverable. It is required that the Contractor propose standards that are generally accepted by the Industry (e.g., PMI, IEEE).
- b. The State shall evaluate the written deliverables by comparing the deliverable to the template format. The elements of the template must be included and addressed in the written deliverable. Providing less than the elements in the template shall not be acceptable.
- c. The State shall evaluate the written deliverable's content for consistency, accuracy, completeness and applicability to the current project. Given the needs of the project, the general project management and software

engineering "best practices" to be used, and the specific deliverable under consideration, the content must be appropriate, complete, and clearly understandable. Providing content in a written deliverable that does not meet the criteria described above for the specific deliverable, shall not be acceptable.

- d. The State will provide written feedback to the Contractor on each deliverable within fifteen (15) State business days of receipt of the deliverable.
- e. In the event the deliverable is unacceptable to the State, the Contractor must submit a revised deliverable within five (5) State business days unless an extension is approved by the CDCR Project Managers. Revised deliverables will be submitted until the State is satisfied with the content and quality of the deliverable, according to this acceptance process.
- f. Once the deliverable is accepted, the Contractor will receive written acceptance.

#### 7. SYSTEM OPERATIONS

The PLM solution must be fault tolerant to allow application availability twenty-four (24) hours a day, seven (7) days a week, except for necessary scheduled downtime for maintenance functions. The Contractor must provide a PLM solution with a minimum system availability of ninety-eight and a half percent (98.5%) over a rolling thirty (30) day period for the life of the contract (excluding scheduled maintenance and backup).

The Contractor must provide response time performance that meets the following requirements:

• Ensure that ninety percent (90%) of all transactions have a response posted to the users' screen in two (2) seconds or less from the time users enter the transaction into the system in both the CalParole portion and the Parole LEADS portion of the final PLM solution. The remaining 10% of transactions must have a response posted to the users' screen in four (4) seconds or less from the time users enter the transaction into the system in both the CalParole portion and the Parole LEADS portion of the final PLM solution.

#### 8. LIQUIDATED DAMAGES

The actual liquidated damages will be \$4,573 per day until acceptance. See Appendix A, Attachment 4, Information Technology Purchase Special Provisions.

The Contractor will be liable for any liquidated damages for late performance\* (including late delivery) for the following deliverable milestones and their task durations, as defined and agreed upon by both parties in the PLM Project Schedule:

Deliverables associated with the Project Management Plan (PMP);

- Deliverables associated with requirements definition and Requirement Traceability Matrices for each project phase;
- Deliverables associated with system and hardware/software design documents;
- Deliverables associated with the System Development Plan and those connected to finalizing software development;
- Deliverables associated with databases and the Data Conversion Plan;
- Delivery of, and deliverables associated with, the Test and Evaluation Master Plan;
- Delivery of, and deliverables associated with these testing phases: Integration Testing, System Testing, Load/Performance Testing, User Acceptance Testing;
- Deliverables associated with the De-centralized Accounts Management Plan:
- Deliverables associated with the Online Training Module;
- Deliverables associated with pilot and production implementation and the Implementation Plan;
- Deliverables associated with end user and operations training before implementation.

Liquidated damages will not exceed 50% of the cost for each deliverable.

<sup>\* &</sup>quot;Late performance" and "late delivery" are defined as tasks, services and/or deliverables undertaken by the Contractor which are completed and/or delivered in any period that is equal to (=) or greater than (>) thirty (30) days past the due date, as defined in the PLM project schedule. For tasks, services and deliverables which are deemed to be "late" as previously defined, the State will invoke the liquidated damages clause (see Appendix A, Attachment 4, Information Technology Purchase Special Provisions).

# PROJECT DELIVERABLE TEMPLATE INDEX

The following deliverables are described in Deliverable number order.

The gray highlighted text within the following templates is not the responsibility of the contractor.

#	Deliverable Title	Requirement ID below will be referenced in each specific Template.
Eac	h listed deliverable may fulfill one (1) or more compo	onents of the Requirement IDs listed below.
<u>A001</u>	Project Management Plan	D-02, HDS-03, IS-01, IS-04, IS-05
<u>A003</u>	Configuration Management Plan	D-02, D-05, DA-01, T-02, TRG-12, IS-01,
		IS-04
<u>A005</u>	Risk Management Plan	D-02, IS-01, IS-04
<u>A006</u>	Agenda/Meeting Minutes	D-02
<u>A007</u>	Monthly Status Report	D-02
<u>A008</u>	Technical Reviews	C-01, T-03, IS-01, IS-03, IS-04
<u>A009</u>	Software Quality Assurance Plan	D-02, TRG-02, IS-01, IS-04
<u>A010</u>	Data Conversion Plan	D-06, D-07, IS-01, IS-02, IS-04, C-01, C-02,
		C-03, C-04, C-05
<u>A011</u>	System Integration/Interface Plan	D-05, D-07, DA-01, IS-01, IS-02, IS-03, IS-
		04, T-03, IP-01, IP-02, IP-03
<u>A012</u>	Implementation Plan	D-05, D-07, DA-01, IS-01, IS-02, IS-03, IS-
		04, IS-05, T-03, IP-02, IP-03, HDS-03
<u>A013</u>	Operational Recovery Plan	D-05, D-06, TRG-02, CNP-01, CNP-02,
1.101		CNP-03, CNP-04, CNP-05, IS-01, IS-04
<u>A101</u>	System Requirements Specification	D-05, D-07, IS-01, IS-04, C-01, C-02, C-03,
1400	Detailed Design Constitution	C-04, C-05, IP-01, IP-03
A102	Detailed Design Specification	D-05, D-07, IS-01, IS-04, IP-01
A103	System Development Plan	D-05, D-07, IS-01, IS-04, IP-01, T-02
<u>A104</u>	Database Schema	D-04, D-05, D-07, IS-01, IS-04, C-01, C-02,
A 4 0 E	Detabase	C-03, C-04, C-05
<u>A105</u>	Database	D-05, D-07, IS-01, IS-04, C-02, C-03, C-04, C-05
A106	Software Source and Executable Code	DA-01, IS-01, IS-04
A107	Converted Data	D-06, DA-01, IS-01, IS-04, C-02, C-03, C-
<u> </u>	Convenied Data	04, C-05
Δ125	Contract to SyRS Traceability Matrix	IS-01, IS-04, IP-01, T-01, C-01
A126	SyRS to DDS Traceability Matrix	IS-01, IS-04, IP-01, T-01, C-01
A127	SyRS to System Test Cases Traceability Matrix	IS-01, IS-04, IP-01, T-01, C-01
A201	Test and Evaluation Master Plan	D-06, IS-01, IS-04, T-01, T-02, T-04, T-05,
7.201	Totalia Evaluation Muotor Fidir	T-06, T-07, T-08, C-01
A202	Test Cases	D-06, IS-01, IS-04, T-01, T-02, T-04, T-05,
7.202		T-06, C-01

#	Deliverable Title	Requirement ID below will be referenced in each specific Template.
Eacl	h listed deliverable may fulfill one (1) or more compo	nents of the Requirement IDs listed below.
<u>A203</u>	Test Results	D-06, IS-01, IS-04, T-01, T-02, T-04, T-05, T-06
<u>A204</u>	Test Summary Report	D-06, IS-01, IS-04, T-01, T-05, T-06
<u>A300</u>	Training Plan	D-03, IS-01, IS-04, TRG-01, TRG-02
<u>A301</u>	Training Materials	D-03, IS-01, IS-04, TRG-01, TRG-02
<u>A400</u>	Online Help	D-03, D-05, IS-01, IS-04, TRG-01, TRG-02
<u>A401</u>	User Reference Guides (Quick Reference Guide, User Guide, Account Administrator Guide)	D-03, IS-01, IS-04, TRG-01, TRG-02, HDS- 06
A402	Technical Documentation: System Maintenance Plan – A402a; System Operations Guide – A402b; Help Desk Guide – A402c.	System Maintenance Plan = D-05, IS-01, IS-04, IS-05, TRG-01, TRG-02, HDS-02, IP-02.  Systems Operations Guide = D-05, D-06, IS-01, IS-04, IS-05, TRG-01, TRG-02, IP-02.
		Help Desk Guide = D-05, IS-01, IS-04, TRG-01, TRG-02, HDS-07.
<u>A500</u>	Release Notes	D-05, DA-01, TRG-01, TRG-02
<u>A600</u>	Software Development/Support Tools	DA-01, IS-06
<u>A601</u>	Commercially Obtained Software Media and Licenses	DA-01, IS-06
<u>A700</u>	Security Plan	D-05, IS-06
A800	Knowledge Transfer Plan	IS-01, IS-04, IS-05, TRG-01, TRG-02, IP-02

# A001 - Project Management Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A001

#### Title:

Project Management Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-02, HDS-03, IS-01, IS-04, IS-05.

#### Date of Submission:

Thirty (30) calendar days after the Contractor starts work

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within five (5) State business days.

Updates: The plan shall be updated to track all subsequent changes to management of the project. The plan shall be maintained current to within twenty-two (22) calendar days of any change (unless otherwise specified and agreed.)

#### Distribution:

Electronic copy in MS Office format

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

#### **Preparation Instructions:**

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

Insert your project management sub plan component in each appropriate location where indicated by "include or refer to ..." These components can be submitted as an attachment which is appropriately referenced.

# <u>A001 - Project Management Plan Template</u>

Project planning is essential for ensuring that the project will be completed on budget, on schedule, and meet the customers needs.

## 1.0 Introduction

# 1.1 Project Overview

Provide a short background description of the reason for the project. Include the relevant features of the program experiencing the problem. Characterize the project's business case. This should include the conditions that created or significantly contributed to the problem. Identify in business terms the specific objectives the project will achieve.

# 1.2 Project Deliverables

List the major project deliverables and delivery dates in the following table. Add additional rows to the table if necessary.

Major Project Deliverables	Delivery Date:

# 1.3 Evolution of the Project Management Plan

Include the process that will be used to update the Project Management Plan (PMP) on an ongoing basis. Consider the PMP a living document and address when it will be updated, why, and by whom. Also, indicate with whom the document will be shared. Describe how this plan will be completed, disseminated, and put under change control. Describe how both scheduled and unscheduled updates will be handled.

#### 1.4 Reference Materials

Identify source material that adds clarity to the project management plan content. Include a notation of the reference. Examples include: (1) Project Management Institute (PMI), (2) Project Management Book of Knowledge (PMBOK), (3) Institute of Electrical and Electronics Engineers, Inc. (IEEE), (4) State Administrative Manual (SAM), and (5) Statewide Information Management Manual (SIMM).

Reference 1

- Reference 2
- Etc.

# 1.5 Definitions and Acronyms

Include a list of acronyms and definitions in this section that are mentioned in the PMP. If necessary, include a full definition of the term to convey the meaning.

ABBREV1 [Full name 1].....[Definition]

ABBREV2 [Full name 2].....

**EXAMPLE** 

CDCR California Department of Corrections and Rehabilitation

EIS Enterprise Information Services

PMO Project Management Office

TPM Technical Project Manager

UPM User Project Manager

# 2.0 Project Organization

# 2.1 Organizational Structure

Include the project organizational chart here or reference it here as an attachment to this document. Describe the internal management structure of the project, as well as how the project relates to the rest of the organization. Hierarchical organization charts or matrix diagrams may be used to depict the lines of authority, responsibility, and communications within the project.

# 2.2 Project Responsibilities

Identify the roles and responsibilities of the project team members. Add any roles and their associated responsibilities, such as Contractor Project Manager and/or Contractor Project Team that are not specifically identified in the table below:

Role	Responsibilities
Project Sponsor	Responsibility 1
Name	Responsibility 2
User Project Manager Name	Responsibility 1
	Responsibility 2

Role	Responsibilities
<b>Technical Project</b>	Responsibility 1
Manager Name	Responsibility 2
Project Team	Responsibility 1
Name 1 Name 2 Etc	Responsibility 2
Other roles	Responsibility 1
Names	Responsibility 2
Project	Responsibility 1
Stakeholders Name or Group name	Responsibility 2

# 3.0 Managerial Process

# 3.1 Assumptions, Dependencies, and Constraints

Identify any assumptions, dependencies, and constraints for the project. State the assumptions on which the project is based, the events upon which the project is dependent, and the constraints under which the project is to be conducted.

## 3.1.1 Assumptions

Assumptions are factors or conditions that can be assumed to be true in their impact upon the project throughout planning and execution of the project. Assumptions can affect such items as resource availability in terms of staffing, facilities, technology, tools and equipment. Assumptions have an impact in the assessment of risk, and are to be identified and revised throughout the project.

The following are assumptions that may influence the project:

- [Assumption 1]
- [Assumption 2]
- [Assumption 3]
- [etc.]

## **EXAMPLE**

- Full funding will be provided.
- CDCR has project team resources in place and ready to go when the contractor starts work.

- CDCR has project team facilities in place and ready to go when the contractor starts work.
- CDCR subject matter experts will be brought in to the project as required, but will not be full-time on the project.
- All parole offices are connected to the WAN.
- There are no power issues.

# 3.1.2 Dependencies

The three (3) primary types of dependencies include: (1) mandatory dependencies that are absolutely required, (2) discretionary dependencies that are assigned by the Project Management Team, and (3) external dependencies that involve a relationship between project and non-project activities. Dependencies can include sharing of data, function, objects, staff, technology or funding with another entity, project, or system.

The following are dependencies that may influence the Project:

- [Dependency 1]
- [Dependency 2]
- [Dependency 3]
- [etc.]

#### **EXAMPLE**

The following are dependencies that may influence the Project:

- This project cannot implement its system until after the XXX project has been successfully completed.
- This project is dependent upon the Department of Technology Services to provide the required testing environment and acceptable systems support when required.
- The selected contractor must provide the new technology tool with associated training and technical support in a timely manner.
- This project relies upon receiving timely, accurate data from the XXX system.
- This project's staffing is dependent upon the availability of personnel for development purposes that will also be providing technical support for the existing application system.

#### 3.1.3 Constraints

Constraints are limiting factors placed upon the project in terms of technology, schedule, budget, resources, and scope. Constraints are known or suspected obstacles to the project's successful completion. Known constraints are identified during the development of the Project Charter, and refined throughout the project. Constraints have a significant bearing on the assessment of risk for the project. Examples include limited staffing, lack of or limited knowledge, short window of opportunity, use of new technologies and tools, etc.

The following constraints currently exist:

- [Constraint 1]
- [Constraint 2]
- [etc.]

#### **EXAMPLE**

- The system must be implemented and maintained with the funds approved by the State.
- Finance IT project policies and instructions must be adhered to.
- Department of General Services procurement policies and instructions must be adhered to.
- Resources to support the project are limited to existing CDCR staff assigned to the project, and the available skill and experience levels.

# 3.2 Staffing Management Plan

Include or refer to the attached Staffing Management Plan here. The Staffing Management Plan is used by the Project Management Team to determine the appropriate human resources to be used on the project from within: (1) the existing organization, (2) another organization external to the existing organization, or (3) contract services. The Project Management Team is responsible for recruiting the necessary resources with the appropriate background and skills for the project activities.

The Staffing Management Plan should include at a minimum the following:

#### 3.2.1 - Introduction

### 3.2.1.1 Scope

Describe the scope of the staff management plan for this project.

# 3.2.1.2 Purpose

Describe the purpose of the staffing management plan as it relates to this project.

### 3.2.2 - Structure

# 3.2.2.1 Staff Organization

## 3.2.2.1.1 Project Organization

Describe the project organization and include an organizational chart.

#### 3.2.2.1.2 Core Staff

List core staff skills which would be preferable to maintain continuity throughout the life of the project. Include a table with the core project staff.

## 3.2.2.1.3 Risk Mitigation in Staffing

Describe mitigation plans for any staffing risks.

### 3.2.2.2 Staff Sources

### 3.2.2.2.1 Staff Source Listing

Describe potential sources for project staff.

## 3.2.2.2.2 Skills and Experience

Describe the evaluation process for ensuring that staff possess the required skills and level of experience for the project.

## 3.2.2.3 Staffing/De-staffing Approach

Describe the assessment process for evaluating whether additional or less staff are needed for the project. Include a regular timeframe for the assessment in the process. Also include the process for adding or removing staff from the project. As much as possible, maintain staff continuity.

## 3.2.2.4 Staffing Changes

Describe the plan for level of staffing changes over the life of the project.

## Figure B-3-2-2-2 Project Staffing Profile

Include a figure with the projection of the required functional skills versus the project timeframe.

# Table 3-2-2-2 Project Phase – Project Staff

Include a table that includes project staffing by project phase.

# 3.3 Communications Management Plan

The Communications Management Plan guides the project in planning and facilitating structured communications for each phase of the project. It is used for managing the communication efforts for the entire project. This plan includes all forms of communication and the appropriate medium (i.e. e-mail, memoranda, meetings, etc.) to be used for each type of communiqué or document. It addresses "who" receives "what" information, "when" they should expect the information, and "who" is authorized to change the document.

The objectives of the Communication Management Plan are aimed at creating a project culture that ensures (1) the right people have the right information at the right time, and (2) that the information is relevant to each stakeholder's need to understand and execute their project responsibilities. The following five (5) objectives set the groundwork for the Communications Management Plan.

Promote project visibility throughout the organization.

Achieve an accurate enterprise-wide awareness of the ongoing progress of the project.

Foster a culture of enterprise-wide ownership and responsibility for the success of the project.

Provide a vehicle for effective communications and collaboration at all levels of the project across all stakeholder groups.

Ensure that project strategy and approach remain relevant to supporting the strategic direction of CDCR.

# 3.4 Configuration Management Plan

The Configuration Management Plan (CMP) documents what configuration activities are to be accomplished, how they are to be accomplished, who is responsible for doing specific activities, when they are to happen, and what resources are required. Configuration Management (CM) is a key tool used for providing version control for changes to project deliverables. The specific CM tool and process to be used are defined during the planning process.

Changes to any one (1) aspect of the project may impact other aspects such as: (1) Scope, (2) Schedule, (3) Cost, (4) Quality, and (5) Risk. It is the responsibility of the Project Management Team to ensure the evaluation of each proposed change includes communication with the stakeholders and assessment of the impact of that change to each of these areas and to the overall project.

Depending on the depth and breadth of the change, portions of the planning process may be re-executed and may require re-baselining the project schedule.

The CMP shall be prepared as a separate document. See Deliverable A003 for required contents.

# 3.5 Scope Management Plan

The Scope Management Plan is developed to manage any changes to the scope of both the project and product. It covers any and all scope-related changes on a continuous basis throughout the life of the project. It contains a clear description of how the project and product scope changes will be identified, assessed, classified, and integrated or excluded from the plan. Changes to project scope can occur for reasons such as: (1) external events (e.g. regulatory change, business changes, and new technology), (2) errors or omissions in the original scope statement (product or project), (3) performance reports indicating a change in scope may be required (e.g. a component took longer than scheduled and in order to meet the required timeframe or budget, scope may have to be reduced), (4) budget changes, and (5) adjustments due to quality control practices. The Project Management Team must recognize a change has occurred, has been requested, or needs to be requested. The Scope Management Plan is utilized to manage the resolution of the change and to document the results.

# 3.6 Schedule Management Plan

The Schedule Management Plan addresses all of the resources to be utilized during the project. A section of the plan deals with each of the resources (people, equipment, materials), assignments and schedules. The lead times for acquiring resources are documented so the Project Management Team has this information readily accessible when scheduling resources to be available at the optimum time. The Schedule Management Plan clearly defines the appropriate actions to be taken when changes occur. Changes in any of the following areas can result in changes to the project schedule: (1) scope changes, (2) budget changes, (3) performance reports indicating the original estimates were not valid, and (4) adjustments due to quality control findings.

The Schedule Management Plan should include at a minimum the following:

### 3.6.1 - Introduction

#### 3.6.1.1 Scope

The scope section defines the boundaries of the schedule management effort.

## 3.6.1.2 Purpose

Provide a brief discussion of the need for the schedule management on this project. Include a brief description of the project and how this plan inter-relates and integrates with the other management plans.

# 3.6.2 - Roles and Responsibilities

Define the roles and responsibilities of the project management team members relative to controlling and updating the project schedule.

#### 3.6.3 - Schedule Contents

Define what the schedule contains. The schedule may just include the timeline for major events, for small efforts, or may be a full resources/work schedule, by person and day.

### 3.6.4 - Tools

Identify what tools will be used to maintain the project schedule and who, specifically, will have ownership of the tools and will have control for updating the schedule. Also identify any other tools that will be used on the project for schedule control, such as schedule analysis tools, change forms, etc.

# 3.6.5 - Schedule Changes

Describe how changes will be controlled to the schedule and how schedule changes will be coordinated and approved.

#### 3.6.6 - Schedule Reviews

Describe how often the schedule will be reviewed, to include periodic reviews and major reviews. Identify who will be responsible for establishing the reviews and the key stakeholders and development team members that need to participate in the reviews.

## **Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons.

# 3.7 Cost Management Plan

The Cost Management Plan explains when and how changes to the cost baseline can be implemented. A cost baseline is created using estimated resource costs (people, equipment, and materials), project schedule, and Work Breakdown Structure (WBS). The cost baseline is the budget for the project that follows the project calendar by activity and resource, and is used to monitor the actual progress of the project. The Cost Management Plan defines the Cost Change Control process used to manage changes to the cost baseline. Changes to project cost can occur for multiple reasons including major ones such as: (1) scope changes, (2) business needs and issues requiring a budget modification, (3) schedule changes, and (4) adjustments due to quality control findings. The Project Management Team must consistently monitor the project budget in order to recognize as early as possible that a change has occurred or is imminent. The Cost Management Plan is utilized to manage the resolution of the change and to document the results. The Cost Management Plan also defines the roles and responsibilities for project team members and assumptions and constraints with respect to cost.

The Cost Management Plan should at a minimum include the following:

### 3.7.1 - Introduction

# 3.7.1.1 Scope

The scope section defines the boundaries of the cost management effort. This includes the level of control within the project to effect change in cost expenditures or rate of cost expenditures.

### 3.7.1.2 Purpose

Provide a brief discussion of the need for cost management on this project. Include a brief description of the project and how this plan inter-relates and integrates with the other management plans.

## 3.7.2 - Roles and Responsibilities

List personnel classification roles, individuals associated with the roles, (there may be more than one (1) individual for any given role), and the responsibilities associated with each role. Inclusion of an organizational chart showing the identified personnel would be beneficial.

### 3.7.3 - Cost Detail

Define the level of detail required for cost tracking. Costs may be tracked by phase, deliverable, or task depending

on management agreement and need. Identify the increment for tracking costs: daily, hourly, etc.

### 3.7.4 - Tools

List the tools to be used in the cost management effort. Each tool should be described in terms of what functionality it offers and who is responsible for its use on the project.

# 3.7.5 - Cost Changes

Define the mechanism to be used for effecting cost changes. This would include: terminating and/or negotiating contracts (personnel, service, and/or product deliverables), terminating and/or hiring personnel (or reassignment of personnel), and/or altering the schedule (may want to refer to the Schedule Management Plan).

# 3.7.6 - Reviews

Describe how often project cost data will be reviewed. Identify who will participate in the reviews and the metrics to be used in tracking and presenting cost data.

# **Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons.

# 3.8 Quality Management Plan

The Quality Management Plan is used by the Project Management Team to manage the defined quality policy. This plan addresses how quality control, quality assurance, and quality improvements will be implemented throughout the project. Quality control is concerned with monitoring product and management results to determine if they are meeting the defined quality standards (as defined by the Quality Management Plan) for the project and identifying methods to eliminate the causes of unsatisfactory results. All areas of the project, from the project manager's tasks to individual team member tasks, are covered in this document. Managing quality throughout the project life cycle minimizes rework and helps to ensure the product will satisfy the customer requirements.

The Quality management Plan should include at a minimum the following:

### 3.8.1 - Introduction

Provide a brief description of the project and how this plan inter-relates and integrates with the other Project Management plans.

## 3.8.1.1 Scope

Identify and describe the scope and boundaries of the project and the relationship to this plan for ensuring that a quality system is developed and delivered. Some aspects of the system may be outside the control of the project. The boundaries of the Quality Management Plan must be clearly identified and documented. Describe the exemption process for any deviations from the plan.

### 3.8.1.2 Purpose

Provide an overview of the quality management program.

# 3.8.2 - Roles and responsibilities

Provide a description of each project team member and stakeholder involved in quality management and their associated responsibilities for ensuring a quality system is developed and delivered.

## 3.8.3 - Product Description

On a phase-by-phase basis, clearly define in textual terms, with reference to the business needs, the project requirements and the anticipated technical approach used to satisfy the system. The anticipated technical approach is not at the level of defining development methods. It is more at the level of specifying that the solution will use Commercial-Off-the-Shelf items, hardware and software, and the only customization is the configuration of the system and the creation of user and/or maintenance manuals, for example. The intent is to describe the product solution to help define the tasks that must be addressed by the Quality Management Plan.

### 3.8.4 - Quality, Policy, Standards, and Regulations

Identify existing organizational, departmental or divisional, quality policies that were used in developing the project Quality Management Plan, which may include the project charter. In addition, depending on the project process being examined, various standards and regulations may impose specific constraints or directions that provide quality criteria. Some of the project

processes that may be subjected to these standards and regulations are the procurement actions, hiring, acquisition of material resources, design processes, and development processes. The specific Standards and Regulations that will be imposed on the project are documented here as well as how they will be used on the project.

# 3.8.5 - Operational Definitions

Describe in detail what is being measured and how the quality process does that. Document the criteria for quality that will be used to gauge or measure quality with respect to how well the product satisfies its stated need. This is accomplished by establishing the criteria to ascertain successful completion of work products. Start with the deliverables by Work Breakdown Structure (WBS) and define the objective, quality criteria, perfect result, and the acceptable result. A Word table is suggested. Two (2) key questions to ask yourself: First, "What defines the product?" and second, "How will I know if it is good enough?" A good example of an operational definition as it relates to software is errors, which is an attribute that defines the quality of the software. Software error rates must be minimized to ensure the final software item, or program, is a quality product. There are a number of ways of measuring the software error rates but the first level is as the software is being built. For controlling software error rates at the unit level, define a maximum, and/or acceptable, number of errors that are expected during initial unit testing, such as 5% of all initial unit testing could result in an error. For this case, there may also be a lower bound to ensure adequate testing is being performed, such as a 2% error rate. The upper bound, 5%, is a measure of the quality of the programmers coding the software while the lower bound, 2%, is a measure of the effectiveness of unit testing. By defining these levels, this defines the criterion that will be used to determine when the software error rates will be low enough to produce an acceptable quality software product.

#### 3.8.6 - Checklists

Create and document the item-specific tool to be used to verify that a set of required steps has been performed. A checklist is particularly valuable in cases where the series of steps is ongoing. A good example of this is a software quality checklist that is used for reviews, or walk-throughs, of the unit-level source code to ensure compliance with quality factors such as established format, use of comments, proper use of indentations, header identifiers, etc. Create checklists for all items that will be evaluated for quality.

# 3.9 Risk Management Plan

The Risk Management Plan defines the risks that are known for the project, the process to use when unanticipated risks occur, contingency plans for addressing each risk, and the process used to discover and evaluate risks. When risks appear, the Project Management Team needs to know whom to contact, the escalation policy, the impact to the project, and the timeframe for resolving the risk. Every activity in a project needs to be linked closely with the Risk Management Plan, because all activities have some degree of risk associated with them. Risks need to be managed throughout the project.

Describe the process to be used to identify, analyze and manage the risk factors associated with the project. Describe mechanisms for tracking the various risk factors and implementing contingency plans. The specific risks for the project and the methods for managing them may be documented here or in another document included as an attachment. Risk factors that should be considered include contractual risks, technological risks, risks due to size and complexity of the product, risks in personnel acquisition and retention, and risks in achieving customer acceptance of the product.

The Risk Management Plan shall be prepared as a separate document. See Deliverable A005 for required contents.

# 3.10 Risk Response Plan

Include or refer to the Risk Response Plan here. The Project Management Team must consistently perform the following activities (1) Monitor the project to implement the defined risk response when anticipated risk events occur, (2) Update the Risk Management Plan with the results of the implemented risk response or when anticipated risk events fail to occur, and (3) Implement the risk planning process when project changes occur in order to re-assess previously defined risks and to identify potential new risks.

The Risk Response Plan should include at a minimum the following:

#### 3.10.1 - Introduction

### 3.10.1.1 Scope

Define the boundaries of the risk response management effort.

### 3.10.1.2 Purpose

Discuss the need for the risk response management on this project. Include a brief description of the project and how this plan inter-relates and integrates with the other management plans.

## 3.10.2 - Roles and Responsibilities

Define the roles and responsibilities of the project management team members relative to controlling and updating the risk response plan.

#### 3.10.3 Identified risks

Describe the identified risks, the area(s) of the project affected, their causes, and how they may affect project objectives.

#### 3.10.4 - Risk owners

Identify the risk owners with their assigned responsibilities.

#### 3.10.5 - Results

Document the results from the qualitative and quantitative risk analysis processes.

# 3.10.6 - Agreed responses

Document the agreed responses including avoidance, transference, mitigation, or acceptance for each risk in the risk response plan.

### 3.10.7 - Level of residual risk

Document the expected level of residual risk to be remaining after the strategy is implemented.

### 3.10.8 - Specific Actions

Indicate the specific actions to implement the chosen response strategy.

### 3.10.9 - Budget and Times for Responses

### 3.10.10 - Contingency Plans and Fallback Plans

### 4.0 Technical Process

### 4.1 Process Model

Summarize the overall process methodology to accomplish the goals including any applicable graphics. Specify the life cycle model to be used for this project or refer to an organizational standard model that will be followed

# 4.2 Methods, Tools, and Techniques

Include a description of the development/implementation methods, tools, and techniques to be used here. Specify the computing system(s), development methodology(s), team structure(s), programming language(s), and other notations, tools, techniques, and methods to be used to specify, design, build, test, integrate, document, deliver, modify or maintain or both (as appropriate) the project deliverables. In addition, the technical standards, policies, and procedures governing development or modification or both of the work products and project deliverables shall be included, either directly or by reference to other documents.

# 4.3 Infrastructure Plan

Describe the plan for establishing the infrastructure. This plan should address the project infrastructure such as providing space, hardware, software, training, testing environment, etc., for the project team.

# 4.4 Product Acceptance Plan

Describe the plan for acceptance of the products. This should include establishing a formal product acceptance process that includes product acceptance criteria, review and evaluation, approval/disapproval, expected timeframes, and remediation measures for products that do not meet the acceptance criteria.

# 5.0 Work Activities, Schedule & Resource, and Budget

### 5.1 Work Activities

The project work activities describe the work that must be accomplished to complete the project. A diagram depicting the breakdown of activities into sub activities and tasks (a work breakdown structure) may be used.

### 5.2 Schedule & Resource

Include or refer to the Schedule Management Plan (see Section 3.6 of this document) including resources. Provide, as a function of time, estimates of the total resources required to complete the project.

### 5.3 Budget

Include or refer to the Cost Management Plan (see Section 3.7 of this document). Specify the budget allocation to the various project functions, activities, and tasks.

# 6.0 Additional Components (If Applicable)

Include any additional components that add value to the PMP. If present, additional components must be developed in a format and to a level of

detail consistent with the required section of this PMP. Any additional components provided will be included in Appendix A, Attachment 9-A, California Department of Corrections and Rehabilitation, Total Cost Summary Worksheet.

### 6.1 Verification and Validation Plan

Include or refer to the attached Verification and Validation (V&V) Plan here. The V&V person(s) is responsible for determining that the requirements for entering and exiting the various phases of the project are being satisfied. The V&V is responsible for verifying whether the product of each step in the development cycle fulfills all the requirements levied on it by the previous step and is internally complete, consistent, and correct enough to support the next phase. The V&V is also responsible for validating that the product satisfies its intended use and user needs in its operational environment.

### 6.2 Documentation Plan

Include or refer to the Documentation Plan. The Documentation Plan for the project specifies the documentation requirements, milestones, baselines, reviews, and sign-offs for documentation such as software test documentation and user documentation. The documentation plan also provides a summary of the schedule and resource requirements for the documentation effort. The documentation plan may also contain a style guide with naming conventions and documentation formats.

# 6.3 Contractor Management Plan/Procurement Management Plan

Include or refer to the attached Contractor Management Plan/Procurement Management Plan here. The Contractor Management Plan is used by the Project Management Team to manage the solicitation and selection of contractors throughout the project. The contract administrator, who may also be the project manager on small projects, is responsible for monitoring contractor performance and reporting that information to the Project Management Team. Any deviation from the contract needs to be addressed promptly by the Project Management Team. The contract administrator authorizes contractor payments based on performance and payment schedules as specified in the contract.

The Procurement Management Plan describes the procurement process for the project. It covers the types of contracts to use, the contract approval process, and sources for resources. This plan contains only the information needed for the purposes of the current project. The Project Management Team is responsible for obtaining resources in a timely manner and managing the procurement process.

# A003 - Configuration Management Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A003

#### Title:

Configuration Management Plan

#### RFP Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-02, D-05, DA-01, T-02, TRG-12, IS-01, IS-04

#### Date of Submission:

Thirty (30) calendar days after the Contractor starts work

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) State business days.

Updates: The plan shall be updated to track all subsequent changes to management of the project. The plan shall be maintained current to within twenty two (22) calendar days of any change (unless otherwise specified and agreed.)

### Distribution:

Electronic copy in MS Office format

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A003 - Configuration Management Plan Template

### 1.0 Introduction

# 1.1 Scope

Include a full identification of the system to which this document applies and define the boundaries of the configuration management effort. Describe how the project's technical products will be identified and managed, and explain how changes to those products will be controlled, coordinated, and approved; how conformance to requirements will be audited, and how the status of configuration items will be reported.

# 1.2 Purpose

Briefly state the purpose of the system to which this document applies. Describe the general nature of the system; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

## 2.0 Reference

### 2.1 Other Documents

List any supporting documents that are relevant to configuration management.

# 3.0 Organization

# 3.1 Organization Roles and Responsibilities

Describe the structure of the organization(s) who will fulfill and ensure compliance with the configuration management requirements. Include the authority and responsibilities of each organization and its relationship to other organizational entities. Indicate who has the authority to perform the following: originate changes; review changes; approve changes; administer the change process; validate the changes; verify change completion; and release any software, data, or documents. Identify who has the authority to override normal CM procedures during emergency situations and how those overrides will be reconciled with the product baselines.

Explain the role of the project's Change Control Board (CCB), and describe how the CCB will function. Define the authority and the makeup of the CCB. Identify members by name and position. State how changes to the CCB membership will be made known. Describe the relationship between the project CCB, any higher level CCBs, and any other organization involved in configuration management.

# 3.2 Individual Roles and Responsibilities

List the personnel classification roles of the individuals who will perform configuration management activities. A key role will be the Configuration Manager whose authority must be sufficient enough to ensure that unauthorized changes do not take place. Identify the personnel associated with the roles (there may be more than one (1) individual for any given role), and the responsibilities associated with each role. Indicate who is responsible for the following activities: ensuring the integrity of the software system; maintaining physical custody of the product baselines; performing product audits; managing the library; developing and maintaining specialized configuration management tools; and overriding normal configuration management procedures during exceptional situations. Explain who will reconcile overrides with the product baselines and how they will do so that inconsistencies and lost updates do not occur. Include an organizational chart showing the identified personnel, if possible.

### 3.3 Interface Control

Describe the methods that will be used for the functions involving interfaces. Include all types of interfaces such as those among organizational elements, software modules, and between hardware and software. Identify all interface specifications and control documents. Describe the method used to manage changes to interface specifications and related documents. Describe how the configuration management process will ensure changes to interface specifications are accomplished. Describe how the status of interface specifications and documents will be maintained.

# 3.4 Configuration Management Plan Milestones

List the milestones for the major configuration management activities. At a minimum, these should include:

- Establishment of the CCB;
- Establishment of the requirements baseline;
- Establishment of the design baseline;
- · Establishment of the test baseline;
- Establishment of the implementation baseline;
- Requirements review;
- Critical Design review;
- Development review;
- Test readiness review;
- System readiness review;

Configuration Audits, including both functional and physical.

# 4.0 Configuration Identification Activities

# 4.1 Configuration Item Definition

Describe the process for selecting items to be placed under configuration control. Items may include the following: management plan and other management documents; specifications, such as requirements and design specifications; user documentation; test designs, test cases, and test procedure specifications; test data and test generation procedures; support software: data dictionaries: design graphics: source, object, and executable code; software libraries; databases; build instructions; installation procedures; and installation configuration tables. Support software shall include any language translators, operating systems, loaders, debuggers, and other support software. Other hardware related configuration items shall include, but not be limited to, standards and configuration for equipment, communications, security, and safety standards, and tools, training items, manuals, and scripts created for the project. In addition, standard identification procedures must be identified for: standard labels for products, identification of the hierarchical structure of computer programs, component and unit naming conventions. numbering or version level designations media identification methods, database identification methods, and documentation labeling and identification methods. Global configuration items (items used by more than one (1) project) must be identified.

# 4.2 Configuration Item Documentation

Describe the nature of configuration documentation required for each configuration item. Identify the type of information required for each item, such as name, description, internal and external interfaces, and functional and physical attributes; describe nomenclature and numbering schema to be used.

#### 4.3 Establish Baselines

Explain the process for establishing and approving the formal baselines of configuration items. Identify the process for documenting the formal baselines, and explain the procedures for controlling configuration items at the baseline level.

# 5.0 Configuration Control Activities

# 5.1 Change Control Process

Define the procedures necessary to implement changes to any configuration item baseline. The procedures should describe a systematic

process for evaluating, coordinating, and deciding on the nature of proposed changes to the baseline, and for tracking the implementation of those approved changes to the established baseline and the associated documentation. Describe the level of authority required to approve changes. Identify the Change Control Board's (CCB) level of authority and responsibility in this process. Identify the authority of the configuration manager, and explain the procedures to be used by the configuration manager to oversee changes authorized by the CCB. The contractor shall obtain the approval of the Enterprise Information Services's (EIS) CCB prior to the implementation of statewide production. Changes to Global configuration items must be coordinated and approved by the EIS CCB. Emergency procedures must also be defined.

# 5.2 Configuration Management Documentation

Identify the required documentation associated with the change control process. Explain the use of the forms, and identify the information that will be required as part of a change request. Describe the process for logging and tracking change requests. If the process changes for different life cycle phases, include the changes and routing instructions.

# 5.3 Configuration Management Library

Explain the plan for establishing a configuration management library as a method to securely store configuration items. Identify the process for software library control including access control, read and write protection, configuration item protection, archive maintenance, change history, and disaster recovery. Describe the processes for identifying all items in the library, documenting the location and contents of each configuration item, and establishing the procedures for retrieving items from the library. Also include control procedures for non-released software, off-the-shelf software, and other special software products.

# 6.0 Configuration Status and Accounting Activities

### 6.1 Status Accounting

Maintain status accounting so that a continuous record of the status of all baselines is kept. Describe the process for documenting change requests. Include the status of proposed changes and the implementation status of approved changes. Describe how information on the status of the various configuration item baselines will be collected, verified, stored, linked, and reported. Describe the accounting process of keeping records of the other configuration management activities: configuration identification, configuration control, and configuration auditing.

# 6.2 Status Reporting

Identify the configuration status reports and records that will be generated during the project. Indicate the frequency of each report, identify the individual(s) responsible generating the reports, and explain the method of distribution of each report. Reports must include tracking problem reports. Identify what information must be available for status reports. Explain the intended audience for each report as well as the content and format.

# 7.0 Configuration Audit and Review Activities

### 7.1 Establish Audit/Review Criteria

Identify and document the criteria to be used during an audit or review. Indicate the frequency of the audits/reviews, establish rules of conduct, and identify who will participate, as well as their roles and responsibilities. Identify which configuration items will be covered by each review and audit. State the procedures to be used for identifying and resolving problems that are discovered in reviews and audits.

### 7.2 Conduct Audit/Review

Describe the process to conduct a verification and validation audit/review. Explain how the configuration item baselines will be scrutinized against the audit criteria. Explain what information related to the audit/review outcome will be documented and maintained.

### 7.3 Audit/Review Follow-up

Describe the process for verifying and validating whether the proposed configuration is complete and consistent. Describe how action items resulting form the audit will be tracked. Document the process for monitoring action items, and explain the requirements for completing an audit.

### 8.0 Release Procedures

State procedures for the release of configuration item baselines into production.

# 9.0 Tools, Techniques and Methodologies

Include name, description, function, and procedures for any automated configuration management tools here.

# 10.0 Supplier Control

If subcontractors must adhere to the same configuration management as the project, state that fact here. Include any subcontractor or contractor provided software.

## 11.0 Records Retention and Collection

Include plans to retain and safeguard formal documentation for a selected timeframe.

# **Additional Appendices**

Label appendices alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The IT project should use as many appendices as is reasonable and makes sense for the deliverable.

# A005 - Risk Management Plan Coversheet

,	System:	Item Number:
l	Parole LEADS Modernization Project	A005

#### Title:

Risk Management Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-02, IS-01, IS-04

#### Date of Submission:

Thirty (30) calendar days after the Contractor starts work

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) State business days.

Updates: The plan shall be updated to track all subsequent changes to management of the project. The plan shall be maintained current to within twenty-two (22) calendar days of any change (unless otherwise specified and agreed.)

### Distribution:

Electronic copy in MS Office format

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A005 - Risk Management Plan Template

### 1.0 introduction

# 1.1 Scope

The scope section defines the boundaries of the risk management effort. This entails the areas of interest for risk classification, the types of risks to be evaluated, the level of effort to be expended on specific risk ratings, and the type of monitoring and tracking to be performed. This is the section for defining the difference between an issue and a risk and whether or not both are of interest.

# 1.2 Purpose

Provide a brief discussion of the need for the risk management on this project. Include a brief description of the project and how this plan interrelates and integrates with the other management plans.

### 2.0 References

#### 2.1 Other Documents

List any supporting documents that are relevant to the risk management.

# 3.0 Organization

# 3.1 Roles and Responsibilities

List personnel classification roles, individuals associated with the roles (there may be more than one (1) individual for any given role), and the responsibilities associated with each role. Inclusion of an organizational chart showing the identified personnel would be beneficial.

### 3.2 Escalation Process

Define the mechanism and roles involved for escalation. This would include moving issues to risks, resource allocation shortages or conflicts, and risk severity changes.

### 3.3 De-escalation Process

Define the mechanism and roles involved for de-escalation. This would include moving risks to issues, removing escalation previously implemented, and risk severity changes.

### 3.4 Conflict Resolution

Define the roles and procedures associated with conflict resolution. Include the types of conflict that should be resolvable by each role. Use of the escalation and de-escalation processes should be referred to if necessary.

## 4.0 Risk Identification Process

### 4.1 Risk Identification Areas

Define the areas for which risks will be determined. These may include: scope, communications, quality, budget, schedule, staff, hardware selected, specific areas of the project, or tools to be used during the project.

#### 4.2 Risk Identification Classification

Define the classification levels to be used when a risk has been identified. These could be designations such as low, medium, and high. Each classification level should be defined by how the risk is assessed to be at that level, i.e. the algorithm or methodology to use to determine the classification level. In addition, define the severity or action to be taken for each classification, i.e. mitigate, plan for contingency, or both.

#### 4.3 Risk Identification Personnel

Identify the personnel, per Section 3.1 Role and Responsibilities, who are responsible for identifying project risks. The personnel should be associated with a specific risk area as defined in Section 4.1 Risk Identification Areas

### 5.0 Risk Evaluation Process

### 5.1 Risk Probability of Occurrence

Define the algorithm or methodology to be used to define the likelihood the risk will occur. The probability may be numeric or it may be a designation such as high, medium, or low.

## 5.2 Risk Impact of Occurrence

Define the algorithm or methodology to be used to define the significance of the risk actually occurring. The significance should be specified quantitatively. This may be a numeric designation or a classification such as high, medium, or low. Specify the type of impact that will occur if the risk actually occurs as well.

# 5.3 Risk Classification Assignment

Define the algorithm or methodology to be used to obtain the classification of the identified risk using the probability and impact determined above.

#### 5.4 Risk Evaluation Personnel

Identify the personnel; refer to the Organization section that will be involved in the evaluation process. The personnel should be associated with a specific risk area defined above.

# 6.0 Risk Mitigation Process

# 6.1 Risk Mitigation Approach

For each risk identified requiring mitigation, define the type of mitigation to be performed and the tasks to be used to accomplish the mitigation. The result of this process should be the beginning of a plan for how the risk is to be mitigated.

## 6.2 Risk Mitigation Schedule

Prepare a schedule for the tasks identified in the approach above.

# 6.3 Risk Mitigation Personnel

Identify the personnel associated with each task including an estimate of the time required for each task.

# 7.0 Risk Contingency Process

### 7.1 Risk Contingency Approach

For each risk identified as requiring a contingency, define the tasks to be used should the risk occur. The result of this process should be the beginning of a plan for what to do if the risk occurs.

# 7.2 Risk Contingency Schedule

Prepare a schedule for the tasks identified in the approach above.

### 7.3 Risk Contingency Personnel

Identify the personnel associated with each task including an estimate of the time required for each task.

# 8.0 Risk Tracking Process

## 8.1 Risk Tracking Metrics

Specify the metrics to be captured for each category of risk. Each metric should be specified with the rationalization for the selection, values or value ranges, and the associated interpretation should be included.

# 8.2 Risk Reporting

Define the reporting mechanism to be used for risk status updates and resolution. These reports should cover all the needed information for appraising management of the status of any risk, including mitigation steps taken, contingency plans implemented and/or executed, personnel assigned and any impact to the overall project schedule or quality.

# 8.3 Risk Tracking Personnel

Identify the personnel associated with each task including an estimate of the time required for each task.

# 8.4 Risk Tracking Schedule

Prepare a schedule for the collection of the metrics, reporting, and personnel identified in the above.

# 9.0 Issue Tracking Process

# 9.1 Issue Tracking Metrics

Specify the metrics to be captured for each category of issues. Each metric should be specified with the rationalization for the selection, values or value ranges, and the associated interpretation should be included.

### 9.2 Issue Reporting

Define the reporting mechanism to be used for issue status updates and resolution. These reports should cover all the needed information for apprising management of the status of any issue, including actions taken and by whom, resolutions made and by whom, personnel assigned, and any impact to the overall project schedule or quality.

### 9.3 Issue Tracking Personnel

Identify the personnel associated with each task including an estimate of the time required for each task.

# 9.4 Issue Tracking Schedule

Prepare a schedule for the collection of the metrics, reporting, and personnel identified in the above.

# **Additional Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons.

A006 – Meeting Minutes

System:	Item Number:
Parole LEADS Modernization Project	A006
Title:	

Meeting Minutes

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C. The template following this coversheet is for the contractor to document information for requirement ids: D-02.

### Date of Submission:

Five (5) State business days after each meeting

### Distribution:

Electronic copy in MS Office format

### Approval:

Not required.

#### Comment:

### **Preparation Instructions:**

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The meeting minutes shall include the following information:

- a. A title page containing name of the meeting and the date, the program for which the meeting was held, and name and address of the contractor preparing the minutes:
- b. Summary of the purpose and objectives of the meeting;
- c. Information on the meeting identification, place, time, prepared agenda and an attendee list;
- d. Summary of discussions:
- e. List of conclusions and agreements reached;
- f. List of actions items including a statement of the action, name of the person assigned to the action item, and action item due date.
- g. Supporting documentation as required to document the meeting such as copies of handouts and presentation materials.

# A007 – Bi-Weekly Status Reports

System:	Item Number:
Parole LEADS Modernization Project	A007
Title:	

Bi-Weekly Status Reports

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-02.

#### Date of Submission:

Due every two (2) weeks at the close of business on the 2<sup>nd</sup> and 4<sup>th</sup> Wednesdays of each month.

#### Distribution:

Electronic copy in MS Office format

# Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

### The report shall include:

- a. A front cover sheet which includes at a minimum: the contractor's name and address; the contract number; the nomenclature of the system or program; the date of the report; the deliverable Item Number; the name of the organization for which the report is prepared; the name and telephone number of the preparer of the report.
- b. Activity Summary This section lists the activities (including deliverables) which are on-going, planned for this reporting period and addressed (initiated or completed), planned for this reporting period but not addressed, not planned for this reporting period but addressed, and planned for the next reporting period.
- c. Schedule Status Describe the actual progress made against planned milestones and deliverables during the reporting period. Include any revised dates.
- d. Financial Status (planned versus actual) Describe the following topics at a minimum: All project expenditures to include all resource costs (labor, hardware,

#### RFP CDCR -5225-103

# Appendix A, Attachment 2 STATEMENT OF WORK

System:	Item Number:
Parole LEADS Modernization Project	A007

### Title:

Bi-Weekly Status Reports

- software, licenses, etc.); Labor hours by job category expended for the reporting period. A clear explanation shall be provided of variances from the plan.
- e. Scope Change Metrics Describe the following topics at a minimum: The number of proposed changes; The number of approved changes; The number of rejected changes; The number of implemented changes (as an indicator of project size and stability).
- f. Quality Metrics Describe the progress on quality planning, quality assurance, and quality control including but not limited to: Results of sampling, inspections, audits, etc. (such as the number of defects found in each deliverable, number of defects corrected in each deliverable, etc.); trends; quality improvement recommendations.
- g. Risk/Issue Information Describe: Risk Assessment updates; opened, changed, and/or completed issues; completed major issues (problems); action plans containing deliverables and deadlines. Indicate any special assistance required.
- h. Special Topics (any urgent topics)

Use appendices for any necessary tables, references, photographs, illustrations, and charts.

# A008 - Technical Reviews

System:	Item Number:
Parole LEADS Modernization Project	A008

### Title:

**Technical Reviews** 

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: C-01, T-03, IS-01, IS-03, IS-04

### Date of Submission:

Ten (10) State business days prior to each Technical Review meeting submit the Briefing Package (agenda and review documents)

Ten (10) State business days after each Technical Review submit Meeting summary notes and Technical Review Completion Report

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

# Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The contractor shall conduct technical reviews for the PLM project. At a minimum, the reviews shall include:

- Requirements Technical Review
- Critical Design Technical Review
- Development Technical Review
- System and Integration Test Readiness Technical Reviews
- System and Integration Test Technical Reviews
- Performance Test Readiness Technical Review
- Performance Test Review

System:Item Number:Parole LEADS Modernization ProjectA008

Title:

**Technical Reviews** 

- Pre-Production User Acceptance Technical Review
- User Acceptance Technical Review
- Site Readiness Technical Review

Post-Implementation Review (thirty (30) continuous calendar days of production environment Maintenance and Operations with a minimum 98.5% system availability/uptime).

The contractor shall produce a Briefing Package for each Technical Review, consisting of an agenda for the technical review and the document(s) to be reviewed. Informal reviews of draft deliverables prior to the technical review(s) may be conducted to facilitate the approval process.

The following reviews shall cover the associated document(s):

<u>Requirements Technical Review</u>: (After Requirements Activities)

System Requirements Specification (SyRS)

Contract to SyRS Traceability matrix

A list of acceptance letters for other Requirements Activities documents.

<u>Critical Design Technical Review</u>: (After Design Activities)

Detailed Design Specification (DDS)

SyRS to DDS Traceability Matrix

Define User Acceptance Criteria

A list of acceptance letters for other Design Activities documents.

Development Technical Review: (After Development Activities)

**Development Database** 

SyRS to Software Source Code Traceability Matrix

Software Source Code

**Unit Test Results** 

A list of acceptance letters for other Development Activities documents.

System: Item Number:
Parole LEADS Modernization Project A008

Title:

**Technical Reviews** 

<u>Test Readiness Technical Review</u>: (Prior to both System Testing and Integration Testing)

Establish Initial Test Database

Test and Evaluation Master Plan (TEMP)

SyRS to System Test Cases Traceability Matrix

SyRS to Integration Test Cases Traceability Matrix

**Test Cases** 

Establish Acceptance Criteria

<u>Test Technical Review</u>: (After System & Integration Testing, before Pre-Production User Testing)

Integration Test Results/Summary

System Test Results/Summary

Final Test Database.

<u>Pre-Production User Acceptance Technical Review</u>: (Prior to User Acceptance Testing)

Establish Pre-production database for User Acceptance Testing

SyRS to User Acceptance Test Cases Traceability Matrix

Establish Training database to begin User Training

<u>User Acceptance Technical Review</u>:(After Pre-Production User Acceptance Testing)

Pre-production Test Results/Summary

Results of Training CDC Staff

A list of acceptance letters for other User Acceptance documents

Final Training and Production databases

#### RFP CDCR -5225-103

# Appendix A, Attachment 2 STATEMENT OF WORK

System:	Item Number:
Parole LEADS Modernization Project	A008
Tin-	•

Title:

**Technical Reviews** 

<u>Site Readiness Technical Review</u>: (After Migration to Production Environment and Performance Benchmark Test)

**Production Environment** 

Performance Benchmark Test Results

Site Acceptance Test Plan

<u>Post-Implementation Technical Review</u>: (After thirty (30) continuous calendar days of production environment Operation and Maintenance with a minimum 98.5% system availability/uptime).

- Open issues, problems, and resolutions (bug fixes)
- System Availability/Uptime statistics for thirty (30) continuous calendar days
- System Certification

The Contractor shall produce a **PLM Technical Review Completion Report** after the successful completion of each Technical Review.

The report shall include:

- A front cover sheet which includes the contractor's name and address, the contract number, the nomenclature of the system or program, the date of the report, the specified activity, and the name of the organization for which the report is prepared;
- b. Identify the planned milestones and deliverables from the starting point through completion of the specified activity. Provide the actual dates of the starting point and the completion of the specified activity.
- c. This document should encapsulate all milestones and/or deliverables that occurred during each phase, the closure of open issues, identify any outstanding milestones and deliverables, from the previous Technical Review, that were not completed as planned and formally list all agreed upon items that will be carried over unto the next phase. Both the State and the Contractor must have agreed in writing to carry the milestones and/or deliverables over to the current Technical Review.
- d. Describe the outcome for the specified Technical Review activities and deliverables in terms of planned versus actual for (1) schedule, and (2) cost. Explain any difference between planned and actual.
- e. Describe the outcome for the specified activity in terms of results. Describe at a

#### RFP CDCR -5225-103

# Appendix A, Attachment 2 STATEMENT OF WORK

System:	Item Number:
Parole LEADS Modernization Project	A008
Title:	
Technical Reviews	

minimum the number of requirements, the number of physical components (menus, screens, reports, database tables, etc.), any scope change from the prior activity, progress on Testing, progress on Data Conversion, percentage of work effort completed, estimated system completion date, quality metrics and track through each phase.

f. Outcome of issues and problems from the Technical Review.

# A009 - Software Quality Assurance Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A009

### Title:

Software Quality Assurance Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-02, TRG-02, IS-01, IS-04

### Date of Submission:

Thirty (30) calendar days after the Contractor starts work.

Updates as needed.

#### Distribution:

Electronic copy in MS Office format.

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A009 - Software Quality Assurance Plan Template

# 1.0 Scope

### 1.1 Identification

Provide a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s). Identify the intended recipients of the Software Version Description (SVD) to the extent that this identification affects the contents of the software released (for example, source code may not be released to all recipients.)

# 1.2 System overview

Briefly state the purpose of the system and the software to which this document applies. Describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

# 1.3 Purpose

Summarize the purpose and contents of this document and describe any security or privacy considerations associated with its use.

### 1.4 Referenced documents

List the number, title, revision, and date of all documents referenced in this document. Also, identify the source for all documents not generally available.

# 2.0 Management

## 2.1 Organization

Describe the organizational structure. Reference to other project documents is acceptable.

#### 2.2 Tasks

Describe: (a) the portion of the systems development life cycle covered by this plan; (b) the tasks to be performed, focusing on software quality assurance; (c) relationships between the tasks.

### 2.3 Responsibilities

Describe the responsibilities of each organizational element regarding software quality assurance.

### 2.4 Documentation

## 2.4.1 - Purpose

Identify the documentation governing software development, verification and validation, use, and maintenance. Identify how documentation will be checked for adequacy.

# 2.4.2 - Minimum Documentation Requirements

Describe the minimum project documentation required.

### 2.4.3 - Other Documentation

Describe other project documentation that will be provided.

# 2.5 Standards, Practices, Conventions, and Metrics.

# 2.5.1 - Purpose

Identify the standards, practices, conventions, and metrics to be used for the project. This shall cover both implicit and explicit requirements. State how compliance with these items will be monitored and assured.

# 2.5.2 - Minimum Documentation Requirements

Describe the minimum information technology standards to be implemented and followed for the project.

### 3.0 Reviews and Audits

Describe the technical and managerial reviews and audits that will be provided. State how the reviews and audits will be accomplished. Include at a minimum the following reviews and audits:

- 3.1 Specified Reviews
- 3.2 Functional Audit
- 3.3 Physical Audit
- 3.4 In-process Audits

### 3.5 Other Reviews and Audits

Per the Project Managers.

# 4.0 Problem Reporting and Corrective Actions

Describe the practices and procedures to identify, report, track, and resolve problems identified in software items and the software development and maintenance processes.

# 5.0 Tools, Techniques, and Methodologies.

Identify special software tools, techniques, and methodologies used to support the software quality assurance effort.

# 6.0 Code Control

Define the methods and facilities used to maintain, store, secure and document controlled versions of the identified software during all phases of the software life cycle.

# A010 - Data Conversion Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A010
Title	

#### Title:

**Data Conversion Plan** 

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-06, D-07, IS-01, IS-02, IS-04, C-01, C-02, C-03, C-04, C-05

#### Date of Submission:

Draft submission due five (5) State business days before the Requirements Review meeting, including at a minimum Data Conversion Objectives, Data Conversion Strategy, and Source Specifications.

Revised draft submission due five (5) State business days before the Critical Design Review meeting, including at a minimum the additional subsections of Destination Specifications, and Intermediate Processing Requirements.

Final submission due five (5) State business days before the Development Review meeting, including complete document.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within fifteen (15) calendar days.

Updates as needed.

#### Distribution:

Electronic copy in MS Office format

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A 010 - Data Conversion Plan Template

## 1.0 SCOPE

#### 1.1 Identification

Provide a full identification of the system to which this document applies, including identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

## 1.2 System Overview

Briefly state the purpose of the system to which this document applies. Describe the general nature of the system; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

#### 1.3 Document Overview

Summarize the purpose and contents of this document and describe any security or privacy considerations associated with its use.

# 1.4 Definitions and Acronyms

Provide definitions and a list of the acronyms used in the Data Conversion Plan document.

### 1.5 Referenced Documents

List the number, title, revision, and date of all documents referenced in this document. Also identify the source for all documents not generally available.

# 2.0 Data Conversion Objectives

Describe the overall Objectives to be addressed in the data conversion. Identify the impact of implementing the SYSTEM NAME in terms of data conversion from both paper documents and electronic data. Graphic illustrations of interrelationships are required. The section shall include:

# 2.1 Paper Documents

Describe the paper documents used. Identify the approximate number of records or documents to be converted. Identify the source of the records or documents. Identify the contact point(s) for obtaining the paper documents.

# 2.2 Legacy Systems

Describe the existing systems that the new system replaces or impacts. Provide the name, description of system, and the reason for replacing or impacting that legacy system. Identify who is responsible for the maintenance to that system. Describe the scope of the data conversion for each system.

### 2.3 Error Resolution

Describe the procedure(s) used to identify errors, resolve the error, and document the error resolution.

#### 2.4 Archived Data

## 2.5 Analysis and Reporting

## 2.6 Concurrent Operation

# 3.0 Data Conversion Strategy

Describe the conversion effort. Any conventions needed to understand the overall conversion method shall be presented or referenced. Graphic illustrations of interrelationships are required. The conversion method shall include, at a minimum, a subsection for Central Office, the Data Center, and Complete System Implementation.

### 3.1 Major Systems Involved

Identify the source systems, electronic and hardcopy, that are involved. Identify the goals and issues for each source system.

#### 3.2 Locations Involved

Identify the locations involved, and the part that location plays in the conversion effort.

### 3.3 Conversion Method

Describe any automated method of conversion that requires minimal intervention from State staff and how data will be converted, validated, and loaded into the new system. Describe methods and procedures for data cleansing (e.g. GIS data, photos, etc.) If part or all of the conversion method depends upon system states or modes, this dependency shall be indicated. Any conventions needed to understand the overall conversion method shall be presented or referenced.

At a minimum, describe how these deliverables will be met in the conversion method and Conversion Test Plan: evaluation of data requirements; creation and execution of conversion test scripts;

conversion test cases; the actual data conversion; validation of converted data; reporting and documenting conversion test results; conversion test summary report; importation of validated data into new destination/system.

### 3.4 Conversion Control

Describe the means to centrally control the conversion of selected groups (such as conversion of a single organization versus all organizations at once) to one (1) or more functions at a time, or at various times.

# 3.5 Conversion Reporting

Describe the mechanism for identifying and reporting conversion errors and conversion test results as well as a conversion test summary report.

### 3.6 Conversion Reconciliation

Describe the method to reconcile converted data and differentiate between converted data versus new system data.

### 3.7 Conversion Reversal

Describe the capability to automatically reverse or undo a conversion by conversion group as well as by individuals who move from a converted organization to a non-converted organization.

# 3.8 Conversion Staffing

Describe the needed roles and number of staff needed for conversion. Identify at a minimum [SYSTEM/VENDOR NAME] contractor, State of California, Verification and Validation, and Quality Assurance staff separately.

# 4.0 Data Conversion Preparation and Procedures

Describe the preparation and procedures for, at a minimum, Central Office, the Data Center, and Complete System Implementation. In addition to the requirements specified below, identify: (a) Activities required to perform file balancing and control, and estimate associated staffing requirements; (b) Parallel file maintenance procedures and controls; (c) Special conversion training, such as conversion data entry, file balancing and control; and (d) The number and type of support staff and required time frames.

# 4.1 Source Specifications

Identify the file and/or database name and description, data source, file structure, conversion rules, dependencies, access requirements, data format, and conversion acceptance criteria for each source. This

information is due five (5) State business days before the Requirements Review meeting.

# 4.2 Destination Specifications

Identify the name, data source, access requirements, and data format for each destination. This information is due five (5) State business days before the Critical Design Review meeting.

# 4.3 Intermediate Processing Requirements

Identify the cleansing, validating, and initiating requirements. This information is due five (5) State business days before the Critical Design Review meeting.

# 4.4 Data Element Mapping

Provide a mapping of the source to destination, considering intermediate processing requirements. This information is due five (5) State business days before the Development Review meeting.

# 4.5 Data Conversion Tools and Scripts

Identify the necessary tools and scripts to perform data conversion, intermediate data processing, and loading cleansed data into the destination data repository. Include both automated procedures (conversion programs) and manual procedures (data entry procedures). Define each script necessary. This information is due five (5) State business days before the Development Review meeting.

## 4.6 Testing

Identify conversion verification procedures and activities required for system testing. Identify the testing of tools and scripts, and the validation and verification of resulting test data, in preparation for data loading.

#### 4.7 Timeline

Describe the schedule of activities, to begin shortly after contract award, to complete conversion at implementation.

# 5.0 Decommissioning Legacy Systems

Describe at a minimum: (a) The method and procedures needed to decommission existing legacy systems after the successful implementation of the new system; (b) The impact of decommissioning to all locations.

# 6.0 Legacy System Updates

Provide information about any updates to legacy systems that will remain after the production implementation of the new system.

# <u>A011 – Systems Integration/Interface Plan Coversheet</u>

System:	Item Number:
Parole LEADS Modernization Project	A011

### Title:

Systems Integration/Interface Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, DA-01, IS-01, IS-02, IS-03, IS-04, T-03, IP-01, IP-02, IP-03

### Date of Submission:

Draft submission due five (5) State business days before the Requirements Review meeting, including at a minimum Interface Objectives, Interface Strategy, and Source Specifications.

Revised draft submission due five (5) State business days before the Critical Design Review meeting, including at a minimum the additional subsections of Destination Specifications, and Intermediate Processing Requirements.

Final submission due five (5) State business days before the Development Review meeting, including complete document.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within fifteen (15) calendar days.

Updates as needed.

### Distribution:

Electronic copy in MS Office format

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

System:	Item Number:
Parole LEADS Modernization Project	A011

### Title:

Systems Integration/Interface Plan

### Minimum Content Required:

The Plan shall include the following:

Identify all systems, both internal and external to CDCR, to/from which the proposed system must send and/or receive data.

Explain the purpose and benefits of each interface.

Describe the business process functionality provided by each interface.

Identify any security requirements for each interface.

Specify the data exchanged with each interface, including source of data.

Define the expected transaction/data volume associated with each interface.

Identify any data validation requirements.

Describe the technical environment of the system(s) involved in the interface.

List the type of transfer mechanisms to be used for each interface.

Include a process flow diagram for all interfaces.

Identify the steps needed to operate the interface.

Describe triggers which initiate each interface transaction.

Identify any dependencies associated with each interface transaction.

Define any error processing requirements.

Specify any performance requirements with each interface.

Provide records layouts and testing with each interface

Provide complete Integration/Interface Test Plan, Integration/Interface Test Procedures and Integration/ Interface Test Cases

# A012 - Implementation Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A012

### Title:

Implementation Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C) The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, DA-01, IS-01, IS-02, IS-03, IS-04, IS-05, T-03, IP-02, IP-03, HDS-03

### Date of Submission:

Draft submission due five (5) State business days before the initial Development Review Technical Review meeting.

Final submission due five (5) State business days before the Development Review Technical Review meeting.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within fifteen (15) calendar days.

Updates as needed.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

# Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A012 - Implementation Plan Template

# 1.0 Scope

### 1.1 Identification

Provide a full identification of the application or system to which this document applies, including identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

## 1.1 System Overview

Briefly state the purpose of the system to which this document applies. It shall describe the general nature of the system; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

### 1.2 Document Overview

Summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

# 1.3 Definitions and Acronyms.

Provide definitions and a list of the acronyms used in the Implementation Plan document.

### 1.4 Referenced documents.

List the number, title, revision, and date of all documents referenced in this document. Also identify the source for all documents not generally available.

# 2.0 Impact Analysis and Conversion Strategy.

Describe the impact analysis and conversion strategy for each of the listed areas. The impact of implementing the System on the CDCR shall be identified. Graphic illustrations of the conversion strategy are required. The plan must cover the time period from contract award to complete system implementation (i.e. until all proposed hardware, software, and other necessary components are implemented, accepted by the State and in normal business use.) The impact analysis and conversion strategy shall include, at a minimum, a subsection for each of Parole Headquarters, Data Center, and Complete System Implementation.

# 2.1 Advance Planning and Coordination.

Identify the major areas that are considered. Identify the goals and issues for each major area. Identify all locations the implementation will impact.

### 2.2 Installation of Network and Hardware.

Describe the approach to implementing the network and hardware. Identify the impact of network and hardware installation and modification. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical and contractor staff. Identify all locations the implementation will impact.

### 2.3 Software Installation

Describe the approach to implementation of software. Identify the impact of software installation and modification. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical and contractor staff.

### 2.4 Documentation

Identify the documentation needed for implementation. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical and contractor staff.

# 2.5 Security

Identify the security and preparations needed for implementation. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical and contractor staff.

## 2.6 Training

Describe the approach to provide training. Identify the training needed for implementation by location. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical and contractor staff. Identify the necessary training materials and other resources needed to perform training. This section may, with written CDCR approval, refer to other deliverable documents.

### 2.7 Data Conversion

Describe the approach to data conversion. Identify the impact of data conversion. Identify the staff who will be impacted including at a minimum CDCR CDCR parole, law enforcement, technical and contractor staff (include staff needed for actual conversion, verification, testing, etc.). This section may, with written CDCR approval, refer to other deliverable documents

# 2.8 Staff Transition to New System

Identify the approach and preparation needed for staff transition during the implementation, including knowledge transfer. Identify the staff who will be impacted. Identify the impact to CDCR parole, law enforcement, technical staff, and all contractor staff at a minimum.

# 2.9 Post Implementation Analysis

Identify what analysis will be performed after the specific subsection is completed. Identify the staff who will be impacted including at a minimum CDCR parole, law enforcement, technical staff, and contractor staff.

# 3.0 Operational Preparation

Describe the operational preparation necessary for implementing the System. The operational preparation shall include, at a minimum, a subsection for each of Central Office, and Complete System Implementation. The operational preparation must address Parole Headquarters and Data Center concerns in addition to the new system concerns.

### 3.1 Location Name

### 3.2 Contact Point

Provide the name and phone number for the location contact point

# 3.3 Advance Planning and Coordination

Identify the major areas that are considered. Identify the goals and issues for each major area. Identify all locations the strategy will impact.

# 3.4 Preliminary Site Visits

Identify any needed site visits needed to prepare the operations strategy, implement the strategy, and/or evaluate the strategy (post implementation). Produce site visit reports for the CDCR after the Site Visits.

### 3.5 Site Preparation Specification

Identify any needed preparation(s) that must occur. Provide measures of the preparation (number of documents, number of staff, etc.). Identify the tasks and describe who is responsible for each task. Include physical space needs, cabling, power, special environment needs (heat, humidity, etc.), access, and secure spaces for deployment, parking, inventory procedures for tools, escorts, keys, etc.

### 3.6 Site Readiness Verification

Identify the means to verify and document that the site(s) is(are) ready for implementation.

## 3.7 Acquiring Equipment

Describe the schedule and process to acquire and install needed equipment.

# 4.0 Site Specific Information.

Describe the site-specific information needed for the implementation.

### 4.1 Location Name

# 4.2 Personnel Requirements

By team, describe the composition of the different implementation teams. Define each team member's tasks. Provide a list of the personnel (CDCR and all contractor staff) needed for the Implementation. Identify who is responsible for providing each staff person. Include any special needs or considerations such as pre-authorization for access.

### 4.3 Schedule

Describe the detailed tasks and schedules for the Implementation, showing the interrelationships between the various aspects of implementing the system (i.e. Site Visits, Training, Installation, etc.).

### 4.4 Procedures

Provide the procedures needed for the Implementation. Include step by step procedures for hardware, software, telecommunications, training, and data conversion identifying the group or person(s) responsible for each step. Include anticipated error conditions and appropriate recovery procedures. Also include checklists for hardware, software, telecommunications, training, and data conversion. This section may, with written CDCR approval, refer to other deliverable documents.

### 4.5 Supplies Needed

Provide a list of the supplies needed for the Implementation. Identify who is responsible for providing each supply.

# **Additional Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The contractor should use as many appendices as is reasonable and makes sense for the deliverable.

# A013 - Operational Recovery Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A013

### Title:

Operational Recovery Plan

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-06, TRG-02, CNP-01, CNP-02, CNP-03, CNP-04, CNP-05, IS-01, IS-04

### Date of Submission:

Twenty-two (22) State business days prior to production implementation

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

# Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A013 - Operational Recovery Plan Template

# 1.0 Introduction

## 1.1 Scope

Define the boundaries of the operational recovery effort. This would be the areas of interest for operational recovery, backup and recovery, tape management, and contingency planning.

## 1.2 Purpose

The purpose for operational recovery planning is to assure continuity of computing operations for support of critical applications, produce the greatest benefit from remaining limited resources and achieve a systematic and orderly migration toward the resumption of all computing services within an agency (SAM Section 4843).

Provide a brief discussion of the need for operational recovery on this project. Include a brief description of the project and how this plan interrelates and integrates with the other management plans.

## 2.0 References

# 2.1 Compliance Documents

List all State, Departmental, and any other mandated directives, policies, and manuals being used for operational recovery planning. Note: The State Operational Recovery Requirements are outlined here: http://www.dof.ca.gov/OTROS/StatewidelT/SIMM/documents/SIMM65A\_ORP\_Doc\_for\_Agencies\_Instructions\_200701.pdf

### 2.2 Other Documents

List any supporting documents that are relevant to operational recovery.

# 3.0 Organization

### 3.1 Roles and Responsibilities

List personnel classification roles, individuals associated with the roles (there may be more than one (1) individual for any given role), and the responsibilities associated with each role. Inclusion of an organizational chart showing the identified personnel would be beneficial.

# 4.0 Operational Recovery Process (Operational Recovery Plan)

The operational recovery planning process provides necessary preparation to design and document a sufficient set of procedures to

assure continued operations in the event of an operational emergency. Operational recovery planning will culminate with the documentation of results in the form of an Operational Recovery Plan (SAM Section 4843, Para. 4). The Operational Recovery Plan shall follow the topic outline provided below:

ADMINISTRATIVE INFORMATION—An introduction to the use of the plan, setting forth procedures for updating and distributing the plan, as well as describing the process for periodic testing of the plan.

RECOVERY STRATEGY—A brief narrative of the system's strategy for managing the operational situation, which may include the use of mutual aid agreements, contractor agreements, backup and recovery service agreements, or the re-allocation of facilities and/or resources.

DAMAGE RECOGNITION—This section details the emergency response actions necessary immediately following the operational including: gaining immediate emergency assistance; notifying departmental staff that a serious loss or interruption in service has occurred; and establishing a focal point for coordinating the recovery program, disseminating information and assembling personnel.

DAMAGE ASSESSMENT—This section details the procedures and personnel necessary to assess the damage and determine the level of severity of the incident, including the decision support mechanism required to declare a operational versus a less severe interruption in processing capability.

MOBILIZATION OF PERSONNEL—This section details staff and management responsibilities for mobilizing personnel. Included may be team or individual assignments of responsibility by area of expertise such as: (1) technical staff in the areas of systems software, telecommunications and computer operations; (2) user staff and management to assist in resolution of programmatic issues; (3) business services to support; and (4) personnel and communications staff to disseminate information regarding special work assignments, conditions or locations.

RECOVERY PLAN IMPLEMENTATION—This section systematically details the operational procedures that will allow recovery to be achieved in a timely and orderly way. Included would be the process for recovering the critical data-processing activities, including the process for suspending non-critical activities and any relocation to an interim (back-up) processing site.

PRIMARY—SITE RESTORATION AND RELOCATION—This section details procedures to be followed after the interim processing situation has stabilized. The intent is to provide a framework for restoring full processing capability at a permanent location. Many of the same procedures will be used as were included during the moving of

applications and systems to an interim site as described in the Recovery Plan Implementation procedures.

APPENDICES—A variety of appendices may be attached to the plan. The plan sections described above should contain static procedures, while the appendices would contain operational information that would need continual updating. Some examples of content are: (1) emergency action notification information containing the names and phone numbers of the various management, staff and specialty team members; (2) damage assessment or operational classification forms intended to function as a guide to supplement/support the management decision process; (3) profile of the critical application; 4) departmental hardware and system software inventory; and (5) any data communications network routing information necessary for providing interim processing capability and restoring full processing capacity.

# 5.0 Backup and Recovery Process

The system backup and recovery processes are inter-related to the operational recovery planning described in the previous section. To assist the reader, it is helpful to depict the backup and recovery process graphically by using flowcharting techniques.

The description of the backup and recovery process shall include:

- System administration policies
- User policies
- Assumptions and restrictions
- Hardware and Software specifications for full recovery
- Backup procedures (media type, frequency, automation or robotics, error handling, security, log files, remote vs. local, logical vs. physical, etc.)
- Recovery procedures (on-demand procedures, user requests, and emergency response)
- Verification of procedures
- On-going support of backup and recovery processes (retention, expiration, purge process, media cleaning and restoration, etc.).

# 6.0 Contingency Planning

Contingency planning is also described in the risk management plan and the security and audit plan. Identify and describe in a Contingency Plan for Critical Business Processes which contingencies are related to operational recovery as well as the backup and recovery planning. If contingency planning is a component of another project management process (like Risk Management), provide the appropriate reference.

# **Additional Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The contractor should use as many appendices as is reasonable and makes sense for the deliverable.

# A101 - System Requirements Specification Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A101

### Title:

Systems Requirements Specification

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, IS-01, IS-04, C-01, C-02, C-03, C-04, C-05, IP-01, IP-03

### Date of Submission:

Draft submission due seven (7) State business days prior to the Requirements Review meeting.

Final submission due ten (10) State business days after the Requirements Review meeting.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates: The analysis shall be updated to track all subsequent requirements related documents (e.g. design documents, test plans, approved change proposals, final test results) and changes to requirements to arrive at the final, agreed upon requirement set. The analysis shall be maintained current to within ten (10) calendar days of any change to requirements specifications (unless otherwise specified and agreed) and to within ten (10) calendar days of any requirements related documents.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

# Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## <u>A101 - System Requirements Specification Template</u>

The following is a template for the System Requirements Specification (SyRS). This requirements document is a generalization of a system requirements specification, based on content requirements specified for both a system requirements specification IEEE J-Std-016-1995 and a software requirements specification IEEE 830-1993. The goal of the SyRS is to identify all components of the system: hardware, software, database, and interfaces. The SyRS is reviewed at the Requirements Review and is used to guide the Design Process.

The SyRS is published and approved after the Requirements Review. The SyRS is complete when all components of the system have been sufficiently addressed so that the designers can design the system. That is, there are no unanswered questions about how a requirement is addressed, the functionality to be provided, or what external inputs and outputs exist, in the system.

The SyRS uses the term "item" to refer to a component described in this document. Every item should be considered a configuration control item or an item within a configuration item.

# 1.0 Scope

### 1.1 Identification

Identify the system including any identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

### 1.2 System Overview

State the purpose of the system, explain what the system will and, if necessary, will not do, and describe relevant benefits, objectives and goals.

### 1.3 Document Overview

Describe the contents of the document, explain its organization, and describe any security or confidentiality considerations for the document.

### 1.4 Referenced Documents

Provide a complete list of other documents referenced in the SyRS. Included shall be title, date, and publisher.

# 1.5 Definitions and Acronyms

Define acronyms and terms that are contained in this plan.

# 2.0 Requirements

Specify the requirements of the system that are conditions for its acceptance. Each requirement shall be assigned a project-unique identifier to support testing and traceability and shall be stated in such a

way that objective tests producing relevant, measurable results can be defined for the requirement.

# 2.1 Required States and Modes

If more than one (1) state or mode of operation is required for the system, identity and define each of those states and/or modes. Examples may include normal, training, emergency, degraded, backup, etc. If only one (1) state of mode of operation is required for the system, this subsection may be omitted.

## 2.2 Software Requirements

Identify the required software requirements of the system. System-wide software requirements including but not limited to response times, throughput times, and capacities shall be included. Each process area, process, and function shall be described in its own subsection.

### 2.2.x Process Area x [NOTE: 'x' is to be used for section number incrementation]

Describe each process area grouping in the system including purpose, a summary of primary functions, classes of customers who will be using this part of the system, and interfaces (external and internal between other process area groupings).

# 2.2.x.x - Process x.x [NOTE: 'x' is to be used for section number incrementation]

Include a step by step description for each process within the process area. This description shall include both a narrative and graphical pictorial of the flow of the process. Each necessary function shall be included as an item within the process. Each interface shall also be included.

### 2.2.x.x.x Function x.x.x [NOTE: 'x' is to be used for section number incrementation]

For each function within the process, include the following information about the function:

- Description
- Input data entities
- Algorithm or formula of function
- Output or affected data entities
- Any special error handling requirements

### 2.3 System External Interface Requirements

Identify the required external interfaces of the system (that is, relationships with other entities that involve sharing, providing or exchanging data).

# 2.3.1 – Interface Identification and Diagrams

Identify each required external interface of the system. The identification shall include a unique identifier and name as well as the name, number, version, and documentation references for the interfacing entities (systems, hardware, software, users, etc). One (1) or more interface diagrams shall be provided to describe the interfaces.

# 2.3.x - (Name of) Interface x

### [NOTE: 'x' is to be used for section number incrementation]

Present the interface requirements as assumptions, not requirements, on the other entity. For example, "When the other entity does this, this system shall ..." Include the following external interface requirements:

- Priority that the software item is required to assign the interface
- Requirements on the type of interface (such as real-time data transfer, storage-and retrieval of data, etc.) to be implemented
- Required characteristics of individual data elements that the system must provide, store, send, access, receive, etc, <u>such as</u>:
  - Data type (alphanumeric, integer, etc.)
  - Size and format (such as length and punctuation of a character string)
  - Units of measurement (such as meters, dollars, seconds)
  - Range or enumeration of possible values (such as 0-99)
  - Accuracy (how correct) and precision (number of significant digits)
  - Priority, timing, frequency, volume, sequencing, and other constraints, such as whether the data element may be updated and whether business rules apply
  - Security and privacy constraints
  - Sources (setting/sending entities) and recipients (using/receiving entities)
- Required characteristics of data element logical groups (records, messages, files, arrays, displays, reports, etc.) that the system must provide, store, send, access, receive, etc., such as:
  - Names/identifiers
  - Data elements in the logical group and their structure (number, order, grouping)

- Medium (such as disk) and structure of data elements/logical groups on the medium
- Visual and auditory characteristics of displays and other outputs (such as colors. layouts, fonts, icons and other display elements, beeps, lights)
- Relationships among logical groups, such as sorting/access characteristics
- Priority, timing, frequency, volume, sequencing, and other constraints, such as whether the logical group may be updated and whether business rules apply
- Security and privacy constraints
- Sources (setting/sending entities) and recipients (using/receiving entities)
- Required characteristics of communication methods that the system must use for the interface, such as:
  - Project-unique identifier(s)
  - Communication links/bands/frequencies/media and their characteristics
  - Message formatting
  - Flow control (such as sequence numbering and buffer allocation)
  - Data transfer rate, whether periodic or aperiodic, and interval between transfers
  - Routing, addressing, and naming conventions
  - Transmission services, including priority and grade
  - Safety/security/privacy considerations, such as encryption, user authentication, compartmentalization, and auditing
- Required characteristics of protocols the system must use for the interface, such as:
  - Project-unique identifier(s)
  - Priority/layer of the protocol
  - Packeting, including fragmentation and re-assembly, routing, and addressing
  - Legality checks, error control, and recovery procedures
  - Synchronization, including connection establishment, maintenance, termination

- Status, identification, and any other reporting features
- Other required characteristics, such as physical compatibility of the interfacing Entities (dimensions. tolerances, loads, plug compatibility, etc.), voltages, etc.

# 2.4 System Internal Interface Requirements

Specify the requirements imposed on interfaces internal to the system. If all internal interfaces are left to the design this fact shall be so stated. If such requirements are to be imposed see the subsection 2.3 above.

# 2.5 System Internal Data Requirements

Specify requirements on databases and data files to be included in the system. The Database architecture shall be described both in narrative and pictorial format. Requirements shall be specified for:

- Data integrity (which ensures that database data and structures reflect all changes made to them in the correct sequence)
- Data concurrency and resolution of deadlocks
- Data consistency (which ensures that the data a user is viewing or changing is not changed (by other users) until the user is finished with the data)
- Data efficiency
- Database administration including statistical reporting
- Transaction management requirements
- Data availability
- Data storage and archival/retrieval
- Data backup and recovery requirements including scheduling, timeframes, equipment, facilities and procedures
- Data conversion

# 2.6 System Security Requirements

Specify the system requirements concerned with maintaining security, privacy, and confidentiality. These requirements shall include the user identification and authentication, access, security management and administration, and security auditing requirements. These security requirements shall include physical, network, database, and software. Include HIPAA privacy and security requirements.

# 2.7 Computer Hardware Requirements

Specify the requirements regarding computer hardware that must be used by the system. The requirements shall include number of each type of

equipment, type, size, capacity, and other required characteristics of processors, memory, input/output devices, auxiliary storage, communications/network equipment, and other required equipment. Also, specify the requirements for the computer hardware resource utilization, such as maximum allowable use of processor capacity, memory capacity, input/output device capacity, auxiliary storage device capacity, and communications/network equipment capacity. The requirements (stated, for example, as percentages of the capacity of each computer hardware resource) shall include the conditions, if any, under which the resource utilization is to be measured.

# 2.8 Computer Software Requirements

Specify the requirements regarding computer software that must be used by, or incorporated into, the system. Examples include but are not limited to: operating systems, database management systems, communications/network software, network management system software, utility software, test software, office automation software, and virus protection software. The correct nomenclature, version, and documentation references of each such software item shall be provided.

# 2.9 Telecommunications Requirements

Specify the requirements concerning the network telecommunications that must be used by the system. Examples include geographic locations to be linked; configuration and network topology; transmission techniques; data transfer rates; gateways; required system use times; type and volume of data to be transmitted/received; time boundaries for transmission/ reception/response; peak volumes of data; and diagnostic features. Include some graphic depiction of the telecommunication requirements. Include information on both the Wide Area Network and Local Area Network.

## 2.10 System and Network Management Requirements

Specify the requirements concerning the systems and network administration management for the system. Include but not be limited to: general system and network management, fault management, monitoring detection and isolation of pending potential faults, performance management, operations control management, asset management (monitoring the configuration of assets), accounting management (resource utilization and billing statistics), and software distribution and management. Fault management shall include monitoring, detection, and fault isolation of failed devices (hard faults). Potential faults shall include software faults and automated problem tracking and resolution. Performance management shall include performance monitoring, capacity planning and trend analysis. Also, include any requirements for compatibility with existing system and network management software.

# 2.11 Project Management, Project Activities and Deliverable Requirements

Specify or refer to other documents containing the requirements concerning project management, project activities, and project deliverables that must be used. At a minimum the areas included or referred to shall be:

- Project Management requirements,
- Quality Management requirements (This shall specify the requirements concerned with software quality factors identified in the contract. Examples include but are not limited to quantitative requirements regarding system functionality (the ability to perform all required functions), reliability (the ability to perform with correct, consistent results), maintainability (the ability to be easily corrected), availability (the ability to be accessed and operated when needed), flexibility (the ability to be easily adapted to changing requirements), portability (the ability to be easily modified for a new environment), reusability (the ability to be used in multiple systems), testability (the ability to be easily and thoroughly tested), usability (the ability to be easily learned and used), and other attributes.),
- Risk Management requirements,
- Configuration Management requirements,
- Testing requirements,
- Documentation requirements,
- Training requirements (This shall also specify requirements such as training devices, training materials, and number of personnel who need to be trained in each skill set.),
- Implementation requirements (This shall also specify the requirements concerned with impact on existing facilities and impact on existing equipment.)
- Disaster Recovery requirements (This shall specify disaster recovery and degraded operations that may result including: maximum down time, maximum time to recover from various levels of degraded or no operation, recovery procedure limitations including required interfaces with backup system(s), personnel and equipment requirements for recovery if such requirements are beyond normal staffing needs due to technical or staffing schedule requirements, and any other topics necessary to a complete specification of the disaster recovery planning and system.)
- Maintenance requirements (This shall specify the requirements concerned with system maintenance and software support), and
- Human Factors Engineering requirements (This shall also specify any requirements based on usability of the system.)

## 2.12 Design, Build, and Implementation Constraint Requirements

Specify the requirements that constrain the design, build, and/or implementation of the system. These requirements may be specified by reference to standards. Examples shall include:

Use of a particular architecture or requirements on the architecture, such as required databases or other software units; or use of acquirer-furnished property (equipment, information. or software),

Use of particular design, build, or implementation standards; use of particular data standards; use of a particular programming language, and

Flexibility and expandability that must be provided to support anticipated areas of growth or changes in technology, threat, or mission.

# **Appendix A**

Include conceptual screen and report layouts for the system.

# **Additional Appendices**

Appendices shall be labeled alphabetically Appendices may be used to contain referenced information or information which might otherwise have caused the document to be less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons.

# A102 - Detailed Design Specification Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A102

### Title:

**Detailed Designed Specification** 

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, IS-01, IS-04, IP-01

### Date of Submission:

Draft submission due seven (7) State business days prior to the Critical Design Review meeting.

Final submission due ten (10) State business days after the Critical Design Review meeting.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates: The design shall be updated to track all subsequent requirements related documents (e.g. test plans, approved change proposals, final test results) and changes to design to arrive at the final, agreed upon requirement set. The design shall be maintained current to within ten (10) calendar days of any change to design specifications (unless otherwise specified and agreed) and to within ten (10) calendar days of any requirements related documents.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A102 - Detailed Design Specification Template

The following is a template for the Detailed Design Specification (DDS). This design document is a generalization of a software detail design document, based on content requirements specified for both a system design document and a software design document. The goal of the DDS is to identify all components of the system; hardware, software, database, and interfaces. The DDS is reviewed at the Critical Design Review and is used to guide the Development Process.

The DDS is published and approved after the Critical Design Review (CDR). The CDR DDS is complete when all components of the system have been sufficiently addressed so that the builders can directly implement the components defined in this document and produce the required system. That is, there are no unanswered questions about how a requirement is addressed, the functionality to be provided, or what external inputs and outputs exist, in the system.

The DDS uses the term "item" to refer to a component described in this document. Every item should be considered a configuration control item or an item within a configuration item.

# 1.0 Scope

Include a brief description of the purpose of the system to which the Detailed Design Specification applies and summarizes the content of the document. Define the boundaries, in general terms, of the Detailed Design Specification.

### 2.0 References

List all documents referenced within this document.

### 2.1 Standards References

List all government, ISO, industry, enterprise/agency/division/department, project, and other directive documents applicable to the preparation of the design document and its contents.

# 2.2 Project References

List all project related documents that are referenced within this document.

### 3.0 Definition, Abbreviations, and Acronyms

List all terms and abbreviations, and the definitions used in this document or reference the document that contains the definition appropriate for this document. Include a table or list that shows the construction of each acronym, alphabetically, used in this document.

# 4.0 Detailed Item Identification

Identify all items that will be used to describe and construct the system to be developed. Include narrative, charts and drawings used to identify and delineate the operation and interaction of all components in the system: including the users and any external systems that are needed.

Each of the sub-sections below; Software Detailed Design, Hardware Detailed Design, Database Design, Software Interface Design, Hardware Interface Design, Data Dictionary, Program Specifications, and Notes may be a reference to a document(s) containing the actual design information. When dealing with large systems both project and configuration management may be improved by having multiple documents, rather than one (1) large document.

When a system is to be described using a reference document, the corresponding sub-section in section 4 will contain the reference to the appropriate document(s). The corresponding sub-section in section 5 will be removed. Within a given sub-section in this document there will either be a reference to another document(s) or the actual detailed design information, but not both.

### 4.1 Overview

Provide a brief discussion of the approach being used for the detailed design. The overview should deal with the functionality of the system as well as the expected users and their interaction with the developed system. The reason for the development effort and the benefits expected from the selected design should also be discussed. Additionally, any system-wide design decisions should be discussed and referenced here. An example may include selected approach to meeting the safety, security, and privacy protection requirements regarding CDCR data. Also, any considerations of Bargaining Unit Contract Adherence may be addressed here.

# 4.2 Software Detailed Design

Include narrative, diagrams and charts describing all software items (components, modules, units, etc.) and their relationships within the system. Also, discuss the design decisions and concept of execution.

# 4.2.1 – Software Design

Describe all software items comprising the system to be developed. Using the deliverables from the analysis phase, the business functions should be assembled and design modules constructed. The medium for delivering the business functions should be determined and documented here. Some examples of software items are menu structures, screens, reports, screen dialogues, common or reusable processes, and batch procedures. Identify each item's development status, if known (such as

new development, existing component to be reused as is, existing design to be used as is, existing component to be re-engineered). Each software item identified in this section will have an entry in the Software Items (Section 5.1).

# 4.2.2 - Software Design Decisions

Describe the design decisions, assumptions, and constraints made regarding the software; inputs, outputs, behavior, data (databases and files), safety, security, and construction. Also address performance, response, states, algorithms, privacy, physical criteria, availability, flexibility, and maintainability. Describe the class(es) of design method used, including but not limited to function-oriented, data oriented, real-time control oriented, object oriented, and language oriented. Describe the methodology used to decompose the software into items and components (including but not limited to top-down, bottom-up, object-oriented.)

## 4.2.3 – Concept of Execution

Describe the execution among the various software items. The relationships such as dynamic, control flow, data flow, timing/sequencing, concurrency, tasks, processes, and storage between all the system components (identified items) must be described. This section should also cover assembly, deployment, and operation of the system.

# 4.3 Hardware Detailed Design

Include narrative, diagrams and charts describing all hardware items (components, modules, units) and their relationships within the system. Also cover the design decisions and concept of execution.

## 4.3.1 - Hardware Design

Describe all computer hardware resources (including but not limited to, processors, memory, input/output devices, auxiliary storage, and communications/networking equipment) necessary to develop the system. Each hardware item description should, as applicable, identify the users of the resource, and describe the characteristics of the resource. Present a diagram that identifies and shows the relationships among the planned specifications for the system hardware components, including network/communications maps. Each hardware item identified in this section will have an entry in the Hardware Items (Section 5.2).

## 4.3.2 - Hardware Design Decisions

Describe the design decisions, assumptions and constraints made regarding the hardware, including inputs, outputs, behavior, data (database/files), safety, security, and construction. Also address priority, performance, response, states, algorithms, privacy, physical criteria,

availability, flexibility, and maintainability. Describe the class(es) of design method used, including but not limited to function-oriented, data oriented, real-time control oriented, object oriented, and language oriented (as applicable).

# 4.3.3 - Concept of Execution

Describe the execution among the various hardware items. The relationships such as dynamic, control flow, data flow, timing/sequencing, concurrency, tasks, processes, and storage between all the system components (identified items) must be described. Also cover assembly, deployment, and operation of the system.

# 4.4 Database Design

Include narrative, diagrams and charts describing the logical and physical design of all database items and their relationships within the system design. Also cover the design decisions.

# 4.4.1 - Database Design

Describe all data elements, translating all entities into tables or files. The required views, keys, and indexes should also be identified. The designed files and tables should be tuned for performance and capacity needs. Implications for data conversion should be discussed here. The software design must be coordinated with the database design to ensure the right trade-off decisions are made with regard to tuning. A detailed sizing and capacity plan should also be discussed here. This section should address the database audit, control, security, volume and performance requirements. Each database item identified in this section will have an entry in the Database Items (Section 5.3).

### 4.4.2 – Database Design Decisions

Describe the design decisions, constraints and assumptions made regarding the database including inputs, outputs, behavior, data (database/files), safety, security, and construction. Also address performance, transaction volumes, response, states, algorithms, privacy, confidentiality, volatility, physical criteria, retention cycles, availability, flexibility, and maintainability. List any deviations from design standards, documenting the rationale for any changes. Describe the class(es) of design method used, including but not limited to function-oriented, data oriented, real-time control oriented, object oriented, and language oriented, and the impact on the database design.

## 4.5 Software Interface Design

Include narrative, diagrams and charts describing all software interfaces and their relationships within the system design.

### 4.5.1 – Software Interface

Describe all software interfaces necessary to develop the system. The standards and conventions governing these interfaces should be described here. The Software Detailed Design (Section 4.2) should be utilized in the development of this section. Identify each item's development status, if known (such as new development, existing component to be reused as is, existing design to be used as is, existing component to be re-engineered). Each interface item should identify whether it is fixed, thereby imposing interface requirements on other entities, or modified, thus having interface requirements imposed. Also specify if the interface is external (impacting other systems) or internal to this system. Each software interface item identified in this section will have an entry in the Software Interface Items (Section 5.4.1).

### 4.5.2 - Software Interface Decisions

Describe the design decisions, assumptions and constraints made regarding the software interfaces, including inputs, outputs, behavior, data (database/files), safety, security, and construction. Also address priority, performance, response, states, algorithms, privacy, physical criteria, availability, flexibility, and maintainability. Describe the class(es) of design method used, including but not limited to function-oriented, data oriented, real-time control oriented, object oriented, and language oriented, and the impact on software interfaces.

# 4.5.3 – Concept of Execution

Describe the execution among the various software interface design components. The relationships such as dynamic, control, data flow, timing/sequencing, concurrency, tasks, processes, and storage between all the system components (identified items) must be described. Also cover assembly, deployment, and operation of the system.

# 4.6 Hardware Interface Design

Include narrative, diagrams and charts describing all hardware interfaces and their relationships within the system design.

### 4.6.1 - Hardware Interface

Describe all hardware interfaces necessary to develop the system. The standards and conventions governing these interfaces should be described here. The Hardware Detailed Design (Section 4.3) should be utilized in the development of this section. Each interface item should identify whether it is fixed, thereby imposing interface requirements on other entities, or modified, thus having interface requirements imposed. Also specify if the interface is external (impacting other systems) or internal to this system. Each hardware interface item identified on the

diagrams and charts in this section will have an entry in the Hardware Interface Items (Section 5.6).

### 4.6.2 - Hardware Interface Decisions

Describe the design decisions made regarding the hardware interfaces, including inputs, outputs, behavior, data (database/files), safety, security, and construction. Also address priority, performance, response, states, algorithms, privacy, physical criteria, availability, flexibility, and maintainability. Describe the class(es) of design method used, including but not limited to function, data, real-time control, object, and language oriented, as applicable.

# 4.6.3 – Concept of Execution

Describe the execution among the various hardware interface design components. The relationships such as dynamic, control flow, data flow, timing/sequencing, concurrency, tasks, processes, and storage between all the system components (identified items) must be described. Also cover assembly, deployment, and operation of the system.

# 4.7 Data Dictionary

Provide complete description of all names used or referenced in any section in this document. The information captured should include: data type, size and format, units, range of values, editing rules, accuracy, error tolerance, precision, priority, timing, frequency, privacy and security, volume, sequencing, sources and recipients, data change requirements, valid data and record requirements, and any constraints imposed or assumed. If the system is large enough to warrant reference documents in the above section, this section should become a reference to the master data dictionary.

## 4.8 Program Specifications

Provide description of items and the steps associated with each item needed to construct the software programs comprising the system. The detailed program specifications should be constructed from the outputs of software design, hardware design, software interface design, hardware interface design, and database design. The specifications should be produced in a narrative form, and should allow the developers to build or customize software programs to support the system. Each program specification item identified in this section will have an entry in the Program Specification Items section (Section 5.6).

#### 4.9 Notes

Include any general information that increases the understanding of the document.

# 5.0 Detailed Item Descriptions

Provides a complete description of all hardware, software, database, interface, and program items identified in the item identification section above. All system requirements should trace to some item/operation in this section before the system design is considered complete.

### 5.1 Software Items

Describe all identified software items from the Software Design section (Section 4.2.1).

## 5.1.1-x – Software Item (name specified in charts or diagrams above)

Each software item will be discussed in a subsection of its own.

### 5.1.1-x.1 Software Item Description

The item discussion will cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, interrelationships among the components, and data.

## 5.1.1-x.2 Software Design Traceability

The design item for which this item is providing functionality. If this item traces back to multiple design items, all items should be listed here.

### 5.2 Hardware Items

Detailed descriptions of all identified hardware items from the Hardware Design section (Section 4.3.1).

### 5.2.1-x - Hardware Item (name specified in charts or diagrams above)

Each hardware item will be discussed in a subsection of its own.

### 5.2.1-x.1 Hardware Item Description

The item discussion will cover; name, type, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, and data. Each description shall, as applicable, identify the hardware and software items that will use the resource, describe the allocation of resource utilization to each software item that will use the resource, describe the conditions under which utilization will be measured, and describe the characteristics of the resource.

Descriptions of computing resources shall include, as applicable, manufacturer name and model number, speed and capacity, identification of architecture, character set standards, memory size, type, speed and configuration, data transfer rates/capacities, network topology, protocols used, diagnostic capabilities, and growth capabilities.

# 5.2.1-x.2 Hardware Design Traceability

The design item for which this item is providing functionality. If this item traces back to multiple design items, all items should be listed here.

### 5.3 Database Items

Detailed descriptions of all identified database items from the Database Design section (Section 4.4.1).

# 5.3.1-x – Database Item (name specified in charts or diagrams above)

Each database item will be discussed in a subsection of its own.

## 5.3.1-x.1 Database Item Description

The database item discussion will cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, and processing volumes. The discussion should also cover behavioral design, considerations for safety, security, and privacy protection.

# 5.3-x.2 Database Design Traceability

The design item for which this item is providing functionality. If this item traces back to multiple design items, all items should be listed here.

### 5.4 Software Interface

Detailed descriptions of all identified software interface items, including user interfaces, from the Software Interface section (Section 4.5.1).

### 5.4.1-x - Software Interface Item

Each software interface item will be discussed in a subsection of its own.

### 5.4.1-x.1 Software Interface Item Description

The software interface item discussion will cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, and data. Sources and recipients should also be covered.

### 5.4.1-x.2 Software Interface Design Traceability

The design item for which this software interface is providing functionality. If this item traces back to multiple design items, all items should be listed here.

### 5.5 Hardware Interface

Detailed descriptions of all identified hardware interface items, including user interfaces, from the Hardware Interface Design section (Section 4.6.1).

## 5.5.1-x - Hardware Interface Item

Each hardware interface item will be discussed in a subsection of its own.

# 5.5.1-x.1 Hardware Interface Item Description

The hardware interface item discussion will cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, and data. Communication methods, protocols, and physical compatibility should also be discussed in this section.

## 5.5.1-x.2 Hardware Interface Design Traceability

The design item for which this hardware interface is providing functionality. If this item traces back to multiple design items, all items should be listed here.

# 5.6 Program Specification Items

Describe all identified program specifications items from the Program Specification Items section (Section 4.8).

### 5.6.1-x - Program Specification Items

Each program specification item will be discussed in a subsection of its own.

# 5.6.1-x.1 Program Specification Description

The item discussion will cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, and data. The specification should identify and describe those modules which are required to read/write data, validate/edit input data, format output data, handle errors and exception conditions, initialize and terminate routines, and coordinate the functions of the lower level modules. The specifications should follow the structured methodology identified in 4.2.2, Software Design Decisions, to decompose software into items and components. The programming language to be used and rationale for its use should also be included in the discussion.

# 5.6.1-x.2 Program Specification Design Traceability

The section should identify the design item for which this program specification is providing functionality. If this item traces back to multiple design items, all items should be listed here.

# **Additional Appendices**

Appendices are labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The contractor should use as many appendices as is reasonable and makes sense for the deliverable.

# A103 - System Development Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A103

### Title:

System Development Plan

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, IS-01, IS-04, IP-01, T-02

### Date of Submission:

Draft Ten (10) State business days prior to Requirements Review

Final Ten (10) State business days prior to Critical Design Review

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates as needed

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### **Preparation Instructions:**

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

# A103 - System Development Plan Template

The following is a template for the System Development Plan. The goal of the System Development Plan is to identify early in the project "how" the system will be developed. The plan guides all technical processes, activities, and tasks. Further, the plan will cover everything from assembling hardware to installing software on hardware.

### 1 Scope

Include a brief description of the purpose of the system to which the plan applies and summarize the content of the plan and how the plan's configuration will be managed.

### 2 Applicable Documents

Lists all government, industry, enterprise/agency/department, project, and other directive documents applicable to the conduct of the tasks within the plan.

### 3 Organization

# 3.1 Roles and Responsibilities

Identify and document the organizational structure of the entire system development team. List personnel classification roles, individuals associated with the roles (there may be more than one (1) individual for any given role), and the responsibilities associated with each role. Inclusion of an organizational chart showing the identified personnel would be beneficial.

### 4 Definitions and Acronyms

Lists all terms and the definitions used in this document or reference the document that contains the definition appropriate for this document. Include a table or list that shows the construction of each acronym used in this document.

### 5 Management and Technical Controls

Describe how the management and technical controls levied on the project will influence the system development effort. Specific management and technical controls may be documented in other project plans.

## 5.1 Management Controls

Specifically identify the project management controls that are placed on the project and how they will be implemented. This section may be an overview of the project management processes detailed in other plans; such as, Quality Management Plan, Risk Management Plan, and others. Where applicable, provide direct reference to the other plans.

### 5.2 Technical Controls

Specifically identify the technical controls that will be placed on the development team and how they will be implemented. This section shall also include the steps required to deviate from the established technical controls. If technical controls are part of other project plans, provide direct reference to those plans.

### 6 Development Schedule

Develop a detailed schedule for the overall system development effort. Ensure that specific milestones are included that may have been identified in the various project plans, or when other critical development events must occur. Milestones shall also include deliverables. The schedule shall reflect the required resources to complete the tasks and identify links, or dependencies, with other tasks. Where applicable, provide direct reference to the other plans.

### 7 Deliverables

Identify the deliverables that must be produced over the entire development effort. For each deliverable, identify the review and approval process and how each deliverable ties into the development schedule as a milestone. Also, identify who is responsible for developing the deliverable and obtaining approval, including supporting parties.

## 8 Development Processes

This section identifies the processes and documentation that will be used in the development of the system.

### 8.1 Standards, Practices, and Guides

Describe the software development process to be used on the project. This section identifies the specific standards, practices, and guides that will be used in developing the system. This section shall include coding standards for each language used, contractor or parts selection preferences, material selection preferences, etc. These will be used during the design and development activities and verified during the walk-through.

#### 8.1.1 Standards

Standards shall include those documents that will be used to determine if the product, be it a document, source code, hardware sub-assembly, etc., meets the minimum requirements identified for quality. Standards typically don't specify content but do include things such as format, tolerances, material selection, etc. Some standards may be regulations or described in other project plans. Where applicable, provide direct reference to the other plans.

### 8.1.2.1 Programming Standards

Standards for code shall be provided for each programming language used; including (but not limited to):

- Standards for format (indentation, spacing, order of information, etc)
- Standards for header comments
- Standards for other comments (content expectations)
- Naming conventions for variable, parameters, procedures, files, etc.
- Restrictions, if any, on the use of language specific constructs
- Security standards specific to coding web applications to function in a secure manner when implemented

### 8.1.2.2 Database Standards

Include a detailed description of the database standards utilized during system development. Describe the methodology and justification for naming conventions for

the various database components - objects, tables, columns, constraints, triggers, etc.

### 8.1.3 Programming Tools

Provide a complete description of all programming tools (manual and automatic) that will be use on the project. Include specific information regarding tool ownership - before and after system implementation.

#### 8.1.4 Practices

Practices are mainly internal requirements or "best industry practices". It is important in this section to distinguish the difference between "mandatory" practices and those that are used for best references. Describe the practices to be followed for representing requirements, design, code, test cases, test procedures, and test results. Many of these system development practices are fully described in other project plans. Where applicable, provide a specific reference to other project plans (Detailed Design Specification, Test and Evaluation Master Plan, etc.).

#### 8.1.5 Guides and Checklists

Guides are just as its name states; these are references that can be used, at the users option, to assist them through specific tasks. Identify the system development guides that will be assembled to provide consistent analysis during deliverable review, code walkthroughs, and other critical review and evaluation milestones. Guides assist evaluators to judge conformity to established standards.

#### 8.2 Quality Assurance

Identify how the development process will tie into the project's Quality Management Plan. Also define how the quality control process will be used for ensuring the integrity, adherence to standards, policy, guides, and quality of the development products (e.g., reviews and walkthroughs, etc.). If applicable, provide direct reference to the other plans.

### 8.3 Error Reporting

Identify how errors occurring during system development are documented, submitted, tracked, verified, corrective action approved and implemented, re-tested or validated, and closed. Also define the interaction with the error reporting process and change control management. The goal is to ensure that errors are detected, documented, reported, and corrected with appropriate documentation if there are impacts to an approved baseline or configuration item. If error reporting is integrated into other project plans, provide direct reference to the other plans.

## 8.4 Configuration Management

Define and document how the development effort ties to the configuration management process. While this may be identified when defining the Management and Technical Controls sections, interaction with the development teams and configuration control is one (1) of the most significant development aspects. This task explains when products go under configuration control and how internal (project) change control interfaces with project and departmental change control. It also defines how to change an approved configuration control item, or baseline by identifying specific steps required to submit the change to be

approved, or rejected, as appropriate. Where applicable, provide direct reference to the other plans.

#### 9 Build Procedure

Provide a complete description of items and the steps associated with each item needed to perform the system build. An item should be a configuration control item. The types of items listed are identified on the cover sheet as the build type for the document. If multiple types are covered in the same document the build type specified on the cover should reflect all build types covered in the document.

## 9.1 List of items

Location, name, and build type (i.e. hardware, software, etc.) of each item, which will be needed for the build described in this document. Each item may be software, hardware, bill of materials, another build procedure, or any item under configuration control.

### 9.2 List of Build Dependencies

Location, name, and type (hardware, software, build procedure, etc.) of each Build Procedure which must be at least partially completed before the build described in this document can be completed.

#### 9.3 Build Items

Each item listed must be described as to how this item is incorporated into the build and the required environment for the item. The items are listed in the order they are needed for the build.

### 9.3.1 Build Item

List the steps in chronological order that are to be applied to this item to incorporate the item into the build. Specify the environment required for this item before the steps specified can be completed.

### 9.3.1.1 Environment Required

Specify the environment required for this item before the steps specified can be completed. This would include references to other build procedures or items as necessary.

Note: This may be particularly important for the case of integration and integration tests because there is nowhere else to trace integration requirements.

## 9.3.1.2 Build Steps

List the steps in chronological order that are to be applied to this item to incorporate the item into the build. This should read as a "how to" manual for completion of the build.

#### 9.3.1.2.1 Item Build Step

Describe the step in the build process in precise terms. Each step should describe one (1) and only one (1) action or operation to be carried out. When the item referred to is another build procedure there may be only one (1) step, execute the build procedure.

## A104 - Database Schema Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A104

## Title:

Database Schema

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-04, D-05, D-07, IS-01, IS-04, C-01, C-02, C-03, C-04, C-05

### Date of Submission:

Final Ten (10) State business days prior to Critical Design Review

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

### **Preparation Instructions:**

# A104 - Database Schema Template

- 1. Scope. This section shall contain the following:
  - <u>Identification.</u> This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s). It shall also identify the intended recipients of the Software Version Description (SVD) to the extent that this identification affects the contents of the software released (for example, source code may not be released to all recipients.)
  - System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify current and planned operating sites; and list other relevant documents.
  - <u>Document overview</u>. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.
  - <u>Referenced documents</u>. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not generally available.
- <u>2.</u> <u>System Overview.</u> This section shall contain the following as applicable:
  - User Access Methods, Capabilities, and Roles.
  - Naming Conventions.
  - The Entity Relationship Diagram (ERD)
  - A Description of Application Processing.
  - The Database Vendor and Version.
  - The Operating System Vendor, Type, and Version.
  - The Hardware Requirements, including memory, disc space, number of processors, and speed of processor(s).
  - Performance Expectations.
  - Database constraints used, including; (a) referential integrity; (b) editing; (c) not null
  - Data Dictionary
  - Normalization and Optimization Decisions

# A105 – Database Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A105
Title:	
Database	

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, D-07, IS-01, IS-04, C-02, C-03, C-04, C-05

#### Date of Submission:

Final Development Database ten (10) State business days prior to Development Technical Review

Initial Test Database ten (10) State business days prior to Test Readiness Technical Review

Final Training Databases ten (10) State business days prior to Pre-Production User Acceptance Technical Review

Final Production Databases ten (10) State business days prior to Pre-Production User Acceptance Technical Review

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

#### **Preparation Instructions:**

# A105 - Database Template

The contractor shall provide on electronic media a copy of the fully populated, working database in the PLM system. At a minimum, the contractor shall provide a working, tested, turnkey solution for:

Production Database in the Production Environment

Training Database in the Training Environment

Test Databases in the Test Environments

Development Database in the Development Environment

The devices needed to use each database (disk storage, hardware, software, etc.) on-line.

A separate backup of each database. The media will be determined after contract award, based upon the successful contractor's proposed architecture. The media must be compatible with State equipment, or the devices needed to restore the database must be included in the contractor's proposal.

# A106 – Software Source and Executable Code Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A106

## Title:

Software Source and Executable Code

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: DA-01, IS-01, IS-04

### Date of Submission:

Four (4) months before each System Readiness Review commences and monthly thereafter until completion of system installation.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

## Comment:

### Preparation Instructions:

# A106 - Software Source and Executable Code Template

- 1. Scope. This section shall contain the following:
  - a) <u>Identification</u>. This paragraph shall contain a full identification of the system and the software to which this document applies. It shall also identify the intended recipients of the software to the extent that this identification affects the contents of the software released (for example, source code may not be released to all recipients.)
  - b) <u>System overview.</u> This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.
  - c) <u>Document overview</u>. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.
  - d) Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not generally available.
- 2. Software Version Description. This section shall contain the following as applicable:
  - a) Inventory of materials released. This paragraph shall list by identifying numbers, titles, abbreviations, dates, version numbers, and release numbers, as applicable, all physical media (for example, listings, tapes, disks) and associated documentation that make up the software version being released. It shall include applicable security and privacy considerations for these items, safeguards for handling them, such as concerns for static and magnetic fields, and instructions and restrictions regarding duplication and license provisions.
  - b) Inventory of software contents. This paragraph shall list by identifying numbers, titles, abbreviations, dates, version numbers, and release numbers, as applicable, all computer files that make up the software version being released. Any applicable security and privacy considerations shall be included.
  - c) Changes installed. This paragraph shall contain a list of all changes incorporated into the software version since the previous version. This paragraph shall identify, as applicable, the problem reports, change proposals, and change notices associated with each change and the effects, if any, of each change on system operation and on interfaces with other hardware and software. This paragraph does not apply to the initial software version.
  - d) <u>Adaptation data</u>. This paragraph shall identify or reference all unique-to-site data contained in the software version. For software versions after the first, this paragraph shall describe changes made to the adaptation data.

- e) Related documents. This paragraph shall list by identifying numbers, titles, abbreviations, dates, version numbers, and release numbers, as applicable, all documents pertinent to the software version being released but not included in the release.
- 3. <u>Installation Instructions</u>. This section shall provide or reference the following information, as applicable:
  - a) Instructions for installing the software version
  - b) Identification of other changes that have to be installed for this version to be used, including site-unique adaptation data not included in the software version
  - c) Security, privacy, or safety precautions relevant to the installation
  - d) Procedures for determining whether the version has been installed properly
  - e) A point of contact to be consulted if there are problems or questions with the installation
- 4. Possible problems and known errors. This paragraph shall identify any possible problems or known errors with the software version at the time of release, any steps being taken to resolve the problems or errors, and instructions (either directly or by reference) for recognizing, avoiding, correcting, or otherwise handling each one. The information presented shall be appropriate to the intended recipient of this document (for example, a user agency may need advice on avoiding errors, a support agency on correcting them).
- 5. Software source code
- 6. Software Executable Code

# A107 - Converted Data Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A107
Title:	
Converted Data	

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-06, DA-01, IS-01, IS-04, C-02, C-03, C-04, C-05

#### Date of Submission:

Deliver a complete set of converted data in electronic format after data conversion verification and validation has occurred.

#### Distribution:

One (1) copy in electronic format as needed

## Approval:

Written approval/acceptance of the converted data is required from the PLM Project Managers.

#### Comment:

Deliver all converted data in electronic format. Provide this data at various stages in the project as needed for development, testing and implementation.

### Preparation Instructions:

# A125 - Contract to SyRS Traceability Matrix Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A125

#### Title:

Contract to System Requirements Specification (SyRS) Traceability Matrix

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: IS-01, IS-04, IP-01, T-01, C-01

#### Date of Submission:

At the end of the Requirements Phase of the Project Plan.

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

## Preparation Instructions:

# A125 - Contract to SyRS Traceability Matrix

## 1.0 Introduction

# 1.1 Document Purpose

This document collects and summarizes the business requirements developed within the Contract and identifies in which the system requirement from the System Requirements Specification they are implemented.

If appropriate, add project specific information regarding the history and use of this document.

# 1.2 Document Organization

Include any specific information about the audience and organization of this document.

### 1.3 Referenced Documents

If appropriate, include the name, date, and revision number of all documents referenced by this document.

# 2.0 Contract to SyRS Traceability Matrix

Complete the following table for each Contract requirement that must be tracked in order to meet the successful completion criteria for the solution.

# 2.1 Contract to SyRS Traceability Matrix

Contract Requirement Number	Name/Description	SyRS Requirement
1.	[Briefly describe the requirement. If appropriate, refer to the Logical or Physical Requirements documentation section that identifies this requirement.]	[List the SyRS Requirement(s) that implement this requirement]
2.		
3.		
4.		

# A126 - SyRS to DDS Traceability Matrix Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A126

## Title:

SyRS to Detailed Design Specification (DDS) Traceability Matrix

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: IS-01, IS-04, IP-01, T-01, C-01

### Date of Submission:

At the same time as the Final Detailed Design Specification (see Template A102, Detailed Design Specification Coversheet)

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

# Preparation Instructions:

# A126 - SyRS to DDS Traceability Matrix

## 1.0 Introduction

# 1.1 Document Purpose

This document collects and summarizes the system requirements and identifies the dependencies between the requirements, the design units(s) in which the requirement is implemented. Note that the SyRS to DDS Traceability Matrix includes all requirements from the System Requirements Specification document.

If appropriate, add project specific information regarding the history and use of this document.

# 1.2 **Document Organization**

Include any specific information about the audience and organization of this document.

### 1.3 Referenced Documents

If appropriate, include the name, date, and revision number of all documents referenced by this document.

# 2.0 SyRS to DDS Traceability Matrix

Complete the following table for each SyRS requirement that must be tracked in order to meet the successful completion criteria for the solution. This matrix is built by combining and summarizing the system requirements.

Design Unit / Design Component means to identify at a minimum software, hardware, database, interface, and program specification units and/or components.

Number	Name/ Description	Dependencies		Design Unit
		Depends on	Essential For	
1. (System Requirement Number)	[Briefly describe the requirement. If appropriate, refer to the System Requirements documentation section that identifies this requirement.]	[List the numbers of requirements that must be there to support this requirement]	List the numbers of requirements that are supported by this requirement]	[List the designed component(s) that implement this requirement]
2.				
3.				

# A127 - SyRS to System Test Cases Traceability Matrix Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A127

## Title:

SyRS to System Test Cases Traceability Matrix

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: IS-01, IS-04, IP-01, T-01, C-01

## Date of Submission:

Completed prior to the commencement of the Customization & Testing Phase of the Project.

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### **Preparation Instructions:**

# A127 - SyRS to System Test Cases Traceability Matrix

# 1.0 Introduction

# 1.1 Document Purpose

This document collects and summarizes the system requirements and the system test cases that test the validity of the implementation. Note that the SyRS to System Test Cases Traceability Matrix includes all requirements from the System Requirements Specification document.

If appropriate, add project specific information regarding the history and use of this document.

# 1.2 **Document Organization**

Include any specific information about the audience and organization of this document.

### 1.3 Referenced Documents

If appropriate, include the name, date, and revision number of all documents referenced by this document.

# 2.0 SYRS to system test cases Traceability Matrix

Complete the following table for each design unit. This matrix is built by combining and summarizing the Design Units and verifying there is/are Unit Tests supporting them.

Number	Name/Description	System Test
1. (System Requirement Number)	[Briefly describe the requirement. If appropriate, refer to the System Requirements documentation section, which identifies this requirement.]	[List the System Test(s) that verify this requirement is met]
2.		
3.		
4.		
5.		
6.		

# A201 - Test and Evaluation Master Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A201

## Title:

Test and Evaluation Master Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-06, IS-01, IS-04, T-01, T-02, T-04, T-05, T-06, T-07, T-08, C-01

#### Date of Submission:

Ten (10) State business days prior to the end of the Development Phase

Updates as needed

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

# Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

### Preparation Instructions:

# A201 - Test and Evaluation Master Plan Template

The Test and Evaluation Master Plan (TEMP) provides the overall guidance on how a project will conduct all tests. The TEMP outlines the project's testing strategy, and it documents the overall structure and objectives of the testing effort. It provides a framework for generating detailed test plans, and documents an estimate of schedule and resources for the entire test effort. From the TEMP, all other test plans and procedures shall be developed, to include the Unit Test Plan and Procedures, Integration Test Plan and Procedures, System Test Plan and Procedures, the User Acceptance Test Plan and Procedures, and the Performance Benchmark Test Plan and Procedures. The TEMP identifies what testing will be formally conducted on the project, how it will be tested, who is involved in the testing, how the results will be evaluated, the review and approval process, the baseline test schedule, and what resources are required, and it provides templates for the development of the test plans and procedures. Once developed, all parties involved in the testing effort, including project management, sign the TEMP. The TEMP is periodically updated to incorporate final test plans and procedures, and to adjust for any other unforeseen event.

## 1.0 Introduction

## 1.1 Scope

Describe the purpose of the system to which the plan applies. Summarize the content of the plan and how its configuration will be managed.

# 1.2 Purpose

Provide a brief discussion of the need for the TEMP on this project.

### 2.0 References

### 2.1 Compliance Documents

Test and Evaluation Planning shall adhere to IEEE 1012-2004 Standards and to the CDCR IT Standards Manual.

### 2.2 Other Documents

List any supporting documents that are relevant to testing and evaluation planning.

# 3.0 Roles And Responsibilities

Describe each project team member and stakeholder involved in test and evaluation planning, and indicate their associated responsibilities for ensuring the project test plans are followed.

# 4.0 Test Strategy

The following sub-sections define what levels of testing will be established and controlled in accordance with the project requirements. The levels of testing controlled will be based on several factors such as size, complexity, cost, and risk and is unique for every project. Examples of the levels include but are not limited to unit , integration, system , performance benchmark, and user acceptance testing. The testing shall include both implicit and explicit requirements. Once the levels of testing are determined, the strategy for each level of testing is developed. Examples include: functional ("black box") testing, structural ("white box") testing, and statistical testing. Finally, the coverage of the testing effort will be determined to ensure the testing effort covers the required areas. Examples of test coverage include: requirements coverage, statement coverage, path coverage, branch coverage, and usage profile.

# 4.1 Unit Testing

Unit testing involves testing of the smallest design and build units, such as a software library unit, package, hardware circuit board, etc. Unit testing may or may not be controlled at the project level. However, unit testing must occur for the project. This section must identify if unit testing is going to be controlled on the project and what those control procedures are, if controlled. This section must also define the test methodology for conducting unit test, whether it is controlled or not. If unit testing is not controlled, the definition of the test methodology serves as a recommended approach for the testers to conduct unit testing. The test methodology must define both the testing strategy, "black-box," "whitebox," statistical, as well as the coverage approach. For unit testing the coverage approach typically includes statement coverage, path coverage, branch coverage, data type verification, etc. This section must also define the source of the test requirements, such as the Detailed Design Document as the unit must match the requirements defined in the Detailed Design Document.

# 4.2 Integration Testing

Integration testing occurs when the system is put together. Like unit testing, integration testing may or may not be controlled by the project. This section must identify if integration testing is going to be controlled by the project and what those control procedures are, if controlled. This section must also define the testing methodology that will be used for integration testing. Integration testing is unique in that the requirements for evaluating the functionality of an integrated group of hardware and/or software and/or system interfaces may not be well defined. The definition of the integration testing methodology must not only cover the testing strategy and the coverage approach, it must also address how the integration test requirements will be identified. Typically, integration test requirements are contained within the build procedures. The coverage

approach for integration testing typically focuses on the interfaces between the integrated units to ensure data can flow across the interfaces. If functionality can be assessed, then that may be included too

# 4.3 System Testing

System testing is almost always controlled by the project and is normally reflected as a key milestone on the project's master schedule. This section must define the control procedures required for system testing. Also, the system testing methodology must be defined to include strategy and coverage. Coverage for system testing typically includes functional, operational, and if possible maintenance coverage as well as system interface coverage. This section must also define the source of the test requirements, such as the System Requirements Specification as the system must support the requirement defined in the System Requirements Specification.

## 4.4 Performance Benchmark Testing

Performance Benchmark Testing determines whether or not a system can adequately and efficiently handle the volume of data expected to be maintained and processed by the system. It also tests the response times achieved with each transaction. This section must describe the performance benchmark testing, its control procedures, and the testing methodology proposed, to include strategy and coverage. This section should also define how the performance benchmark testing integrates with the other standard testing, and must define the source of the test requirements, such as the System Requirements Specification.

# 4.5 User Acceptance Testing

User Acceptance Testing marks the end of the testing activities and is conducted to determine whether or not the system meets the customer's expectations as documented in the System Requirements Specification. This section must describe the control procedures for user acceptance testing as well as the strategy and coverage approach. The strategy normally used for user acceptance testing is "black-box" to ensure that no potentially intrusive influences are injected into the system. The requirements for user acceptance and coverage approach for user acceptance testing are unique. Requirements for user acceptance testing come from the user and must address the current business needs for the system. The coverage approach for user acceptance testing is typically fragmented since the user is driving what the test cases are. This section must document how the project is going to conduct user acceptance testing, including how the requirements for approval by the users will be developed.

## 5.0 Test Methods

Select methods for testing for each level. Examples of testing methods are simulation, modeling, functional, architectural, top-down, bottom-up, demonstration, inspection, hardware/software-in-the-loop, and analysis. Establish the test readiness criteria for each level of testing. Examples of test readiness criteria include: software units have successfully completed a code peer review and unit testing before they enter integration testing, the software has successfully completed integration testing before it enters system testing, and a Test Readiness Review is held before the software enters user acceptance testing.

# 5.1 Unit Testing

Describe the test method and the readiness criteria that will be used for unit testing.

# 5.2 Integration Testing

Describe the test method and the readiness criteria that will be used for integration testing.

# 5.3 System Testing

Describe the test method and the readiness criteria that will be used for system testing.

# 5.4 Performance Benchmark Testing

Describe the test method and the readiness criteria that will be used for performance benchmark testing.

# 5.5 User Acceptance Testing

Describe the test method and the readiness criteria that will be used for user acceptance testing.

## 6.0 Evaluation Criteria

Define the approach that will be used in establishing the criteria for evaluating the test results. Test results may include simple Boolean pass/fail results or they may include data that may vary in range. This section must define how the test criteria should be established to ensure consistency between the various testers developing the criteria.

# 7.0 Review And Approval Process

Identify the process for the review and approval of test outputs and test hold and continuation for each controlled level of test. As test results are generated, define the process to review the outputs for correctness and errors. The review and approval process will include criteria and approval

levels to halt and/or resume the testing efforts in the event of a deviation, discrepancy, or unexpected result.

# 7.1 Unit Testing

Describe the review and approval process for unit testing. Include a description on how the results will be evaluated against established criteria. Also, define the requirements to halt testing and what is required to resume testing.

# 7.2 Integration Testing

Describe the review and approval process for integration testing. Include a description on how the results will be evaluated against established criteria. Also, define the requirements to halt testing and what is required to resume testing.

# 7.3 System Testing

Describe the review and approval process for system testing. Include a description on how the results will be evaluated against established criteria. Also, define the requirements to halt testing and what is required to resume testing.

# 7.4 Performance Benchmark Testing

Describe the review and approval process for performance benchmark testing. Include a description on how the results will be evaluated against established criteria. Also, define the requirements to halt testing and what is required to resume testing.

## 7.5 User Acceptance Testing

Describe the review and approval process for user acceptance testing. Include a description on how the results will be evaluated against established criteria. Also, define the requirements to halt testing and what is required to resume testing.

# 8.0 Test Resources

Identify the resources for each level of test. The resources need to be defined in terms of type, quantity, skill-level, and schedule availability required to support each test activity.

## 8.1 Unit Testing

Identify the resources required to accomplish unit testing.

## 8.2 Integration Testing

Identify the resources required to accomplish integration testing.

## 8.3 System Testing

Identify the resources required to accomplish system testing.

# 8.4 Performance Benchmark Testing

Identify the resources required to accomplish performance benchmark testing.

# 8.5 User Acceptance Testing

Identify the resources required to accomplish user acceptance testing.

## 9.0 Test Environment

Specify the needed properties of the environment where the testing will occur. Identify the physical characteristics and configurations of the needed hardware. Identify the communications and system software needed to support the testing. Describe the level of security needed for the test facilities, system software, and proprietary components such as software, data, and hardware. Specify any other requirements such as unique facility needs or special test tools.

# 9.1 Data Management of Test Environment

Specify the needed data properties of the environment where the testing will occur. Identify the comprehensive and appropriate test data needed for each kind of testing: unit, integration, system, user acceptance and preformance/stress testing. Describe the method that will be employed in order to provide data backups, data restoration and data refreshment for each of these testing environments. Include a description of the points in time where these activities will need to be performed during each test and how to accomplish the identified data management activity.

## 10.0 Test Master Schedule

Develop a Master Test Schedule for the project reflecting proposed tests and major testing activities performed throughout the project life cycle. The Master Test Schedule should be kept at a high-level, and detailed schedules for the various tests should be developed within each of the test plans (i.e. unit, integration, system, user acceptance, etc). Major milestones on the Master Test Schedule should be reflected on the Master Project Schedule, such as the Test Readiness Review and the system and user acceptance test completion.

# 11.0 Test Plans And Templates

Develop plans for planning the different levels of tests. Test plans for unit, integration, system, performance benchmark, and user acceptance testing shall be included in this document. Test Plans should be designed

to accomplish specific objectives, define responsibilities, schedules and resource requirements. Test Procedures should provide the detailed direction, steps, of setting up the test environment, test inputs, test data collection, test article identification, and all the necessary steps to accomplish the testing. The test plan templates shall be developed for each identified level of test and shall include the following information:

## 11.1 Test Plan Scope

Identify the system and the requirements to be tested. Describe the features of the system which are the object of the test. Specify the major activities, techniques, and tools to be used.

# 11.2 Purpose

Provide a brief discussion on the need for conducting this specific test for this project.

# 11.3 Roles and Responsibilities

Describe each project team member and stakeholder involved in the test, and identify their associated responsibilities for ensuring the test is executed appropriately.

#### 11.4 Test Items

Specifically identify the items to be tested, including their configuration number and version number. Explain how the items will be provided for testing, and indicate what media will be used for their transmission.

## 11.5 Features to be Tested

Identify all software features and combination of features that will be tested. Identify the test-design specification for each feature.

#### 11.6 Features Not to be Tested

Identify any software features that will not be tested. Explain the purpose of not testing that item.

### 11.7 Approach

Based on the high level approach defined in the Test and Evaluation Master Plan, describe the approach that will be used for testing. This refined approach should be specific and identify each item and how it will be tested. The approach should be described in sufficient detail to permit identification of the major testing tasks and be able to support the estimation of time required to complete each. Specify the major activities, techniques, and tools that will be used to test each item and requirement. Identify if there are any testing constraints on the approach. Define how the requirements and test cases will be traced.

#### 11.8 Item Pass/Fail Criteria

Specify the criteria to be used to determine whether each test item has passed or failed.

# 11.9 Suspension Criteria

Specify the criteria used to suspend all or a portion of the testing activities. Specify the testing activities that must be repeated when testing is resumed and how they must restart.

# 11.10 Test Deliverables

Identify all deliverables that will result from the test. Deliverables shall include, but not be limited to, test procedures, cases and results, test logs, and the summary test report.

## 11.11 Testing Tasks

Identify all tasks necessary to prepare for the test. Explain any inter-task dependencies.

### 11.12 Environment Needs

Identify the characteristics and configurations of the hardware required to execute the test case, if appropriate. Identify the system and application software required to execute the test case, if appropriate. Specify any other requirements such as unique facility needs.

## 11.13 Staffing and Training Needs

Specify the staffing needs by skill level. Identify training requirements and options for providing the necessary skills.

#### 11.14 Schedule

Based on the schedule provided in the Test and Evaluation Master Plan, provide a detailed schedule for the activities required for this specific test. Estimate the time required to complete each testing task.

## 11.15 Risks and Contingencies

Identify any risks that may impact each test. Specify the contingency plan for each risk.

## 11.16 Approvals

Identify the names and titles of all persons who much approve the plan. Include space for signatures and the date.

# **Additional Appendices**

Label appendices alphabetically. Appendices may be used to contain referenced information or information which might otherwise have

### RFP CDCR -5225-103

Appendix A, Attachment 2 STATEMENT OF WORK

rendered the document less readable if placed in the main body. Appendices may also be used for information that needs to be bound separately for security reasons. The contractor should use as many appendices as is reasonable and makes sense for the deliverable.

# A202 - Test Cases Coversheet

System: Parole LEADS Modernization Project	Item Number: A202
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#### Title:

**Test Cases** 

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C. The template following this coversheet is for the contractor to document information for requirement ids: D-06, IS-01, IS-04, T-01, T-02, T-04, T-05, T-06, C-01

#### Date of Submission:

Ten (10) State business days prior to the end of the Development Phase Updates as needed.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

## Comment:

### Preparation Instructions:

The deliverable(s) shall include, but are not limited to the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

For the Test Cases deliverable, the Actual Results subsection shall not be completed.

*Mercury's Test Director tool* will be employed to track all requirements and to create test scripts for the various testing phases described below:

<u>Integration Test</u> - shall combine hardware components, software components, and system interfaces in an orderly progression to evaluate the interaction between them until the entire system has been assembled. The test shall ensure that the sets behave as well as the independently tested units did, and to demonstrate that this combination fulfills the system requirements. The testing shall prove that all areas of a system will interface with each other correctly, that the data flow does not include any gaps, and that the system works as a integrated unit when all the fixes are complete.

<u>System Test</u> - shall be performed to evaluate whether the complete, integrated system complies with its specified requirements. System testing shall demonstrate that the software and hardware together accomplish all system functions and that the build

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# Appendix A, Attachment 2 STATEMENT OF WORK

System:	Item Number:
Parole LEADS Modernization Project	A202

#### Title:

**Test Cases** 

process has resulted in a product that is ready for production. System testing shall ensure that all independently tested units/modules/components function as expected when integrated as a whole.

<u>Performance Benchmark Test</u> - shall be performed to determine whether or not a system can adequately and efficiently handle the volume of data expected to be maintained and processed by the system, and to demonstrate the response times achieved with each transaction. The test shall ensure that the system operates in a similar manner regardless of the load being processed at a given time. The test shall demonstrate and confirm the optimal maximum system size to guarantee acceptable performance.

<u>User Acceptance Test</u> - shall be performed to determine whether or not a system meets the customer's expectations as documented in the System Requirements Specification. The user acceptance test shall be planned and executed in coordination with the customer, and shall ensure that the system operates in the manner expected. The test shall demonstrate the full business functionality of the system as performed by the user in production mode.

# A202 - Test Cases Template

The testing process assesses and evaluates the quality of work throughout the project life cycle, and it verifies that the design and development of the solution satisfy the requirements. Test Cases provide a means to systematically conduct testing and to record the results of the testing. Test Cases shall document the environment and the circumstances surrounding each individual test. The test cases shall conform to the strategy documented and include the tests identified in the Test and Evaluation Master Plan (Template A201). Prepare separate test cases for each of the following tests: Unit Testing, Integration Testing, System Testing, User Acceptance Testing, and Performance Benchmark Testing.

## Test Case Header

Include the words Test Name, Test Package Number, Test Number, Test Function, Test, Description, System Date, Test Date, Tester's Identity, whether the test passed, failed, was invalid, or produced no noticeable change. The following figure provides an example of the test case header.

[System Name] Test [Test Name] Test

## 1.0 Introduction

## 1.1 Scope

Identify the system and the requirements to be tested. Describe the features of the system which are the object of the test. Specify the major activities, techniques, and tools to be used.

### 1.2 Purpose

Provide a brief discussion on the need for conducting this specific test for this project.

# 2.0 Roles and Responsibilities

Describe each project team member and stakeholder involved in the test, and identify their associated responsibilities for ensuring the test is executed appropriately.

## **3.0** Test

### 3.1 Test Items

Identify the features to be exercised by this test case.

## 3.2 Input

Specify each input and their sequence required to execute the test case.

# 3.3 Output

Specify all of the outputs, the specific sequence of each output in relation to the inputs, and features required of the test. Provide the exact value, with tolerances where appropriate, for each required output or feature.

#### 3.4 Environment

Identify the characteristics and configurations of the hardware required to execute the test case, if appropriate. Identify the system and application software required to execute the test case, if appropriate. Specify any other requirements such as unique facility needs.

# 4.0 Expected Results

Describe the outcome anticipated from the test case. Specify the criteria to be used to determine whether the item has passed or failed.

# 5.0 Set-Up Procedures

Describe the sequence of actions necessary to prepare for execution of the test.

# 6.0 Stop Procedures

Describe the sequence of actions necessary to terminate the test.

## 7.0 Actual Results

## 7.1 Output

The actual results shall demonstrate the various outputs produced during the test as well as the final outcome at the conclusion of the test. While executing the test, record and describe the visually observable outputs as they occur. Produce tangible evidence of the output such as a screen print. At the conclusion, describe the actual outcome. Indicate whether the test passed or failed, and identify any discrepancies between the expected results and the actual results.

# 7.2 Test Defect Log

Describe the method to be used to record and monitor each test case that does not produce the expected results. Explain the process used to uniquely identify each separate defect. The defect log shall include, but not limited to, the following information: defect number, test packet number, test number, description of defect, tester's name, retest date, and results of retest. Indicate who will maintain and monitor the test defect log.

# A203 - Test Results Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A203

## Title:

Test Results

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-06, IS-01, IS-04, T-01, T-02, T-04, T-05, T-06

#### Date of Submission:

Ten (10) calendar days after each type of testing being performed.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

## Comment:

# Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

For each test case within each type of test, the Test Results shall demonstrate the results of the tests. Complete the Actual Results subsection for the Test Cases deliverable. Document the results of the following tests: Unit Test, Integration Test, System Test, Performance Benchmark Test, and User Acceptance Test.

# **A204 - Test Summary Report Coversheet**

System: Parole LEADS Modernization Project	Item Number: A204

#### Title:

Test Summary Report

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-06, IS-01, IS-04, T-01, T-05, T-06

#### Date of Submission:

Ten (10) calendar days after each type of testing being performed.

Updates as needed.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

# Comment:

### Preparation Instructions:

# A204 - Test Summary Report Template

The Test Summary Report documents and outlines the results of all testing efforts. The report shall summarize all testing activities and provides an evaluation based on the test results.

## 1.0 Introduction

# 1.1 Scope

Define the boundaries of the Test Summary Report. Include all testing facets documented in the Test and Evaluation Master Plan (TEMP) as well as the outcome of the individual test cases.

# 1.2 Purpose

Explain the reason for completing the Test Summary Report for this project.

# 2.0 Roles And Responsibilities

Describe each project team member and stakeholder involved in the test summary, and identify their associated responsibilities for ensuring the test summary is prepared appropriately.

# 3.0 Summary

Summarize the overall process used to complete the test plan. Information should include: identification of the items tested, their version/revision level, and the association to the appropriate test case plan, the total number of test packets and number of test cases that were accomplished, a list of the artifacts produced as a result of the testing effort, and a description of the environment where the testing occurred.

## 4.0 Variances

Indicate the number of defect reports generated from the testing effort. Specify the nature of the incidence and the reason for the occurrence. Explain the correction efforts made to alleviate the event from reoccurring.

# 5.0 Comprehensive Assessment

Evaluate whether the testing process included all aspects of the TEMP. Identify features or feature combinations that were not sufficiently tested, and explain the reasons.

# 6.0 Summary of Results

Summarize the results of the testing. Information should include: number of test packets; number of test cases per packet; total number of test cases, number of tests passed, number of tests failed, number of defects, identity of all resolved defects and summary of their resolutions, identity of all unresolved defects, number of defects, number of defects resolved; and number of defects unresolved.

# 7.0 Evaluation

Provide an overall evaluation of each test item including its limitations. This evaluation must be based upon the test results and the item level pass/fail criteria. An estimate of failure risk may be included.

# 8.0 Summary of Activities

Summarize the resources and actual time used to complete the major testing activities and events. Include: total number of staff; total lab setup time, total hours for test planning, total hours for test execution, total hours for Test Summary Report development, and total hours for testing effort.

# 9.0 Approvals

Identify the names and titles of all persons who must approve this report. Include space for signatures and approval dates.

# A300 - Training Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A300
Title:	
Training Plan	
Reference:	
Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-03, IS-01, IS-04, TRG-01, TRG-02	
Date of Submission:	
Draft submission is due twenty-two (22) State business days before initial training class.	
Final submission is due ten (10) State business days prior to the start of user training.	
If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days and prior to the start of user training.	
Updates as needed following revisions.	
Distribution:	
Electronic copy in MS Office format	
Approval:	
Prior written approval of the materials is required by the PLM Project	Managers.
Comment:	
Preparation Instructions:	
The deliverable(s) shall include, but are not limited too, the contents and Template, or equivalent as determined by the PLM Project Maless information than required in the template or any exceptions swithout prior approval from the PLM Project Managers.	anagers. Providing

## <u>A300 - TRAINING PLAN TEMPLATE</u>

## 1.0 Introduction

#### 1.1 Table of Contents

Provide the number, title and page number of each title, section, figure, table and appendix.

## 1.2 Background

Provide details and historical information specific to the product. Data may include a brief explanation of organizations involved in the product development and/or training effort, describe the general nature of the system, and how this system may interact with existing systems. This data is an introduction to the purpose section.

## 1.3 Purpose/Goal

Identify the goals and objectives of this document. The primary goal of the Training Plan is to specify methods for developing and implementing a training program that is appropriate and effective for those who will use and support the system. The specific objectives of the Training Plan are to:

- Identify the tasks, resources, and cost necessary to accomplish the goals and objectives.
- Describe the methodology for developing training materials and how they will be presented.
- Specify the procedures to identify the physical site requirements, required hardware, software, and system environment(s).
- Identify the User Groups and their specific training program(s).
- Establish procedures to determine a training schedule.
- Ensure all aspects of the training process are identified and addressed for the Testers, Users, Administrators, and Help Desk Staff (both technical support and end-user application support). This will assure the appropriate staff members are adequately trained to operate the CDCR product.
- Provide an assessment of the effectiveness of training conducted and a means to provide input to make future training more effective, efficient and meaningful to the users.

## 1.4 Scope

Describe the extent to which this document applies to the organization, projects, and individuals within the CDCR organization. The training plan focuses on these critical areas:

- The development of user documentation and training materials.
- The training of all end-users, support staff, administrators, Help Desk support staff, and future trainers.
- The delivery of a training program to ensure the content and quality of all training materials meets CDCR expectations.
- The support requirements to complete the training tasks. The training plan should cover in detail the requirements for preparing, scheduling and conducting training for CDCR staff.

## 1.5 Roles and Responsibilities

Identify the roles and responsibilities of all personnel and agencies involved in implementing this training plan. The identification shall include the following personnel, as a minimum:

- Project Managers (User Project Managers, Technical Project Managers, etc.)
- Software Project Managers (Staff coordinators, Team Leads, etc)
- Training Coordinators (TCs)
- Developers
- Analysts
- Users

## 2.0 General Description

## 2.1 Prerequisite Knowledge and Skills

Identify and define the knowledge and skills required to perform tasks associated with the training effort. The identification and definitions shall include the following, as applicable:

- List Appropriate Technical Skills/Background required for training
- List Appropriate Non-Technical Skills/Background required for training

## 2.2 Assessment/ Analysis of Knowledge and Skills

An assessment of the current levels of knowledge and skills will help determine the appropriate course of training. Describe the methods to be used to assess/analyze knowledge and skills of system users. Also,

describe the process for analyzing the knowledge gap and how to best approach the training efforts.

## 2.3 Methodology for Knowledge Transfer

CDCR staff must be able to maintain and operate the delivered system. Identify and describe the methodology to be used to transfer the necessary knowledge from contractor and subcontractor staff to CDCR staff. The Technical Knowledge Transfer Plan shall be prepared as a separate document. See Deliverable A800 for required contents.

## 3.0 Training Strategy

## 3.1 Identification of Training Requirements

Address the specific training curriculum necessary for CDCR staff to use and support the new system. Identify the individuals that will require training and describe the training requirements based on the knowledge and skills analysis in Section 2.1 of this template.

## 3.1.1 – Identification of Hardware/Software requirements

Describe the hardware and/or software requirements based on the identification of the training requirements.

## 3.2 Identification of Training Sources

Describe for each training requirement the training source that shall satisfy the requirements. This identification shall form the link between training requirements and training sources.

## 3.3 Training Development

Detail the necessary material to be developed in order to meet the training requirements as identified in Section 3.1 of this template. Training development shall include the following:

- Formal Classroom/Hands-On Training (Master Instruction/Lesson Plan, hands-on exercises to demonstrate skills learned, Train the Trainer, etc.)
- Technical Training for information technology staff in the design, construction, operation and support of the new system. Also training for Help Desk staff (both technical and end-user support).
- User Reference Materials (Quick Reference Guide, User Manual, System Administration Manual)
- OnLine Help
- Help Desk Guide
- System Administration Manual

 Any other applicable training tool (Video, Powerpoint presentation, flip charts, etc.)

## 3.4 Training Delivery

Describe the approach for delivering the identified training. This shall include the sequencing for delivery of training programs and identify the individuals responsible for providing training.

## 3.5 Training Evaluation

Describe the process, to include the use of tools such as a training evaluation form, for evaluating the quality and effectiveness of training. Include any plans for the preliminary evaluation of the training effort.

## 4.0 Training Resource Requirements And Schedule

## 4.1 Training Program Cost

Detail the resources associated with implementing and maintaining the training program. Resources should be quantified in monetary and personnel years (PY) that are applicable to the CDCR's scheduling methods. All resource requirements associated with the training program should be included, such as knowledge and skills identification and assessment, training development/procurement, learning resource center materials, and all PYs necessary to manage and execute the program.

### 4.2 Schedule

Describe the schedule for executing this training plan, including a corresponding chart (Gantt is preferable). Furthermore, this schedule should include detailed information concerning the schedule for developing and revising training courses and the execution of training.

## 5.0 Training Sequencing and Delivery

Establish the interrelationships between various training activities and how training activities will be coordinated. Apply the details for the delivery of the training program that were provided in Section 3.4. and describe interrelationships with other training programs. The training delivery will be prioritized for all levels of the training process.

## 5.1 Product Training and Individual Training

Describe the integration of training objectives as well as the requirements for all training plans. (Training for Data Conversion, Acceptance Testing, etc.) Provide details and sequencing for the delivery methods for all training plans. Also, describe the integration with other training objectives as well as the requirements for any individual-level training plans. (Training for Trainers, Users, Support Staff, etc.)

## 5.2 Training environment

Describe the environment that will be provided for hands-on training. Include information on the equipment, executables, database, security access and other aspects necessary to provide hands-on training.

## 6.0 Training Evaluation

Describe the characteristics of training program metrics. This data may be gathered to assess the effectiveness of the training process and be applied to lessons learned exercises.

## **Additional Appendices**

Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts, sensitive data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendices shall be lettered alphabetically (A, B, etc.). This section shall also include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document. The contractor should use as many appendices as is reasonable and makes sense for the deliverable.

## A301 - Training Materials Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A301

#### Title:

Training Materials (Lesson Plans, Evaluations, and Exercises)

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-03, IS-01, IS-04, TRG-01, TRG-02

### Date of Submission:

Draft submission due twenty-two (22) State business days before initial training class

Final submission due ten (10) State business days before initial training class

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days and prior to start of user training.

Updates as needed

#### Distribution:

Electronic copy in MS Office format.

The contractor shall provide each student enrolled in a class a complete set of the final student materials. Training certificates shall be distributed to all trainees.

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

Other training materials (User Guide, Online Help, and Quick Reference Guide) are addressed under separate title within this template.

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The contractor shall prepare separate lesson plans for the various user categories as outlined in the Training Plan. Contractor may prepare lesson plans according to the contractor's lesson plan format following the standards set in the documentation plan.

The Lesson Plan(s) shall include/address the following:

1) Cover Sheet

System:	Item Number:
Parole LEADS Modernization Project	A301

#### Title:

Training Materials (Lesson Plans, Evaluations, and Exercises)

- a) Originator Information
- b) Course Title
- c) Lesson Title
- d) Instructor
- e) Prepared By/Date
- f) Time Frame
- g) Prerequisites
- h) POST approval
- i) Number of Participants
- j) Space Requirements
- k) Target Population
- I) Performance Goals
- m) Performance Objectives
- n) Evaluation Procedures
- o) Method
- p) Equipment and Supplies
- q) Number of Instructors
- r) Student Materials
- s) Instructor Qualifications
- t) Needs Assessment
- u) Instructor Materials
- v) References
- 2) Introduction
- 3) Presentation
- 4) Instructor Notes
- 5) Application/Exercises (must include Hands-on)
- 6) Summary
- 7) Evaluation

The Evaluation form shall include the following:

**Project Name** 

Title

**Training Date** 

Instructor(s)

The Evaluation shall address the following areas:

- 1) Overall Evaluation
- 2) Presenter
- 3) Content

Effectiveness/Application

4) Training Materials

System:	Item Number:
Parole LEADS Modernization Project	A301
Title:	
Training Materials (Lesson Plans, Evaluations, and Exercises)	
5) Training Environment	
6) Comments	
The training certificate shall include the following: Project Name	
Training Date	
No. of Hours	
Statement of "Completion"	
Instructor(s) Name/Signature Line	
Project Logo	

## A400 - On-Line Help Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A400
Title:	

## Reference:

On Line Help

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-03, D-05, IS-01, IS-04, TRG-01, TRG-02

#### Date of Submission:

Draft On-Line Help portion of Quick Reference, User, and System Administration Guides submission due thirty-two (32) calendar days after completion of Development Phase.

Final On-Line Help portion of Quick Reference, User, and System Administration Guides submission due twenty-two (22) State business days before initial user training class.

If approval of deliverable is contingent on incorporation of changes specified by User Project Manager or designee, an updated submission incorporating the changes shall be provided within ten (10) calendar days and prior to start of user training.

Updates as needed following revisions.

#### Distribution:

On-Line Help to be included as part of the Installation package of complete system.

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

## Comment:

#### Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## A400 - On-Line Help Template

## **On-line Help Templates/Prototypes**

The contractor shall develop a template/prototype for the On-line Help during design phase.

## **On-line Help Flow Chart**

The contractor shall develop a flowchart to show the hierarchical flow of data. The flowchart shall identify the browse sequences of user information.

## **On-line Help**

On-line Help shall be easily accessible/available from the PLM main application window using a menu option and a toolbar button as well as context sensitive with use of the screen help button. Specifically, the on-line help shall at a minimum, but not be limited to the same topics as the User Guide:

What's New/About

On-line help navigation tips

Frequently Asked Questions (FAQs)

Subject-based Table of Contents

Module Introductions

Task-Oriented Modules written in Instructional Mode

Keyword Search Mechanisms (including antonyms, key words and phrases in text)

Keyword Index (Will include synonyms, antonyms, key words and phrases, and no more than two (2) index items per entry will exist. If more, additional index information will be added to make the entry unique)

Graphics figure numbers and names

Glossary

Subject-based Browse Sequences

Standardized format

No right-left scrolling

Help window should leave at a minimum ½ the application screen available

Help maximum of 3 layers deep

Cross References (titles and topics)

Use of screen prints for samples with pop-ups

Minimum but not limited to of 2 screen prints per topic

Allows User Annotation

Allows User Book Marking

Online demonstrations and examples

Field level mouse-over explanations

Special Functional Keys:

- Context-Sensitive Help
- Hypertext Links/Bookmarks

## A401 – User Reference Guides Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A401

### Title:

User Reference Guides

(Quick Reference Guide, User Guide, Account Administrator Guide)

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-03, IS-01, IS-04, TRG-01, TRG-02, HDS-06

#### Date of Submission:

Draft Quick Reference, User, and Account Administrator Guides due thirty-one (31) calendar days after completion of Development Phase.

Final Quick Reference, User, and Account Administrator Guides due twenty-two (22) State business days before initial user training class.

If approval of deliverable is contingent on incorporation of changes specified by the CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days and prior to start of user training.

Updates as needed following revisions.

#### Distribution:

Electronic copy in MS Office format

User Training Class Attendees: 1 copy each of Quick Reference, User, and Account Administrator Guides based on users being trained.

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The **User Guides** and **Account Administrator Guides** shall be modular, task-oriented procedures written in instructional mode for PLM system users. The guides shall meet the objectives of providing concise, easy to understand procedures for the performance of system operation functions. The guides shall be prepared on standard white 8 ½ x 11" paper. The guides will employ industry-standard documentation techniques, including charts, tables, screen prints, graphics, report examples, and icons.

The **Quick Reference** and shall be modular, task-oriented procedures written in instructional and/or referential mode for PLM system users. The guides shall meet the objectives of providing concise, easy to understand procedures for the performance of system operation functions. The Quick Reference Guide shall be prepared on a minimum, but not limited to 8 ½ x 11" tri-fold paper. Quick Reference Guide will employ industry standard documentation techniques, graphics, and icons.

# **Quick Reference, User, and Account Administrator Guides Templates/Prototypes**

The contractor shall develop a template/prototype for the Quick Reference, User, and Account Administrator Guides during Design phase.

## **Quick Reference Guide**

Quick Reference Guide shall address the following topics:

Document Type

- 1. Project/System Name
- 2. Version
- 3. Organization
- 4. Logo
- 5. Descriptive task/functional labels
- 6. Shortcuts
- 7. Quick start guide to show different types of users how to perform typical tasks (if applicable)
- 8. Toolbars (if applicable)
- 9. Helpful Hints/FAQs (if applicable)

## **User Guide**

<u>Title Page:</u> The document shall include a title page containing, as applicable: document number, volume number, version/revision indicator, security markings or other restrictions on the handling of the document, date; document title, name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies.

<u>Introduction</u>: This section shall briefly state the purpose of the system to which this document applies. It shall give a general overview of the system and give a brief description of what this document shall address.

<u>Table of Contents</u>: This section shall contain a table of contents providing the number, title and page number of each titled section, subsection, and appendix.

<u>Getting Started</u>: This section shall provide detailed information regarding the following:

Proper Initializing and Closing procedures for the system

Identify system environment, such as toolbars, menu options, etc

**Basic Functions** 

Help Features

<u>System Functions</u>: This section shall provide detailed information addressing the use of all available end-user system operations/capabilities. These functions shall be categorized within Sections and organized in a logical, relevant format. For each identified Section, the following shall be provided:

Section Introduction/Overview

Specific functions and detailed procedures

Reports: This section shall provide detailed information addressing the following:

List all available reports and any variations possible

Specific functions and detailed procedures to produce reports

<u>Error Messages</u>, <u>Known Problems</u>, <u>and Error Recovery</u>: This section shall list all error messages and address the means by which to resolve them. Provide any known system problems that a user could encounter and describe the procedure(s) used to identify errors, resolve the error and document the error resolution.

- 1) <u>Appendix</u> (If applicable): Appendices may be used to provide information published separately for convenience in document maintenance. Each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendices shall be lettered alphabetically.
- 2) <u>Definitions</u>: All key terms, acronyms and abbreviations used within the document shall be listed and defined.
- 3) Keyboard shortcuts
- 4) Glossary of Terms

<u>Keyword Index</u> (Will include synonyms, antonyms, key words and phrases, and no more than two (2) index items per entry will exist. If more, additional index information will be added to make the entry unique.)

Account Administrator Guide shall contain but not be limited to the following:

<u>Title Page:</u> The document shall include a title page containing, as applicable: document number, volume number, version/revision indicator, security markings or other restrictions on the handling of the document, date, document title, name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies.

<u>Introduction</u>: This section shall briefly state the purpose of the system to which this document applies. It shall give a general overview of the system and give a brief description of what this document shall address.

<u>Table of Contents</u>: This section shall contain a table of contents providing the number, title and page number of each titled section, subsection, and appendix.

<u>Overview of Account Administrator Activities</u>: This section shall include the responsibilities, forms, policies and procedures expected of the local system administrator.

<u>Description of Systems Files and Directories</u>: The section shall outline the structure of files and directories utilized by the system and any file maintenance that is required.

Management of User Accounts and Privileges: This section shall address the following:

Adding a User

Deleting a User

Resetting User Password

Changing User Privileges/Rights

Backup and Recovery:

<u>Error Messages, Known Problems, and Error Recovery</u>: This section shall provide detailed information addressing system errors in relation to the Account Administrator activities. These errors shall be categorized within Sections and organized in a logical, relevant format. For each identified Section, the following shall be provided:

- a. Section Introduction/Overview
- b. Error Message Name/Code/Description/Definition and the corresponding corrective action (can also include function(s) which caused error to happen)
- c. Detailed procedures used to identify an error, resolve the error and document error resolution
- 2. <u>Appendix</u> (If applicable): Appendices may be used to provide information published separately for convenience in document maintenance. Each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendices shall be lettered alphabetically.
- 3. <u>Definitions</u>: All key terms, acronyms and abbreviations used within the document shall be listed and defined.
- 4. Keyboard shortcuts
- 5. Glossary of Terms

6. <u>Keyword Index</u>: Will include synonyms, antonyms, key words and phrases, and no more than two (2) index items per entry will exist, unless necessary to make the entry unique. (Include appendices as is reasonable and makes sense for the deliverable.)

## A402 - Technical Documentation

Technical Documentation consists of:

- 1. System Maintenance Plan A402a
- 2. System Operations Guide A402b
- 3. Help Desk Guide A402c

System:	Item Number:
Parole LEADS Modernization Project	A402a

## Title:

System Maintenance Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids:

A402a = D-05, IS-01, IS-04, IS-05, TRG-01, TRG-02, HDS-02, IP-02

#### Date of Submission:

Twenty (20) State business days prior to production implementation

Updates as needed

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## **System Maintenance Plan Template**

The following is a template for the System Maintenance Plan (SMP). The goal of the SMP is to support those who will maintain the system by specifying how the system is setup, how to troubleshoot system failures, how to configure the system, how the system is installed, and any periodic maintenance requirements, including maintenance procedures for the system. The SMP is created during the build phase, and is used during the operations and maintenance phase of the system. The objective is to use the knowledge from the actual builders of the system in describing the system maintenance procedures.

The SMP undergoes acceptance testing with the maintenance personnel during the testing phase. The SMP is complete when all components of the system have been sufficiently addressed so that the maintenance staff can perform the activities defined in this document to support the system. That is, there are no unanswered questions about how a maintenance requirement is addressed in the system.

The SMP uses the term "item" to refer to a component described in this document. Every item shall be considered a configuration control item or an item within a configuration item that reflects the latest version of that item.

## 1 SCOPE

This section includes a brief description of the purpose of the system to which the SMP applies and summarizes the content of the document. This section defines the boundaries, in general terms, of the System Maintenance Plan.

## 1.1 Identification

This subsection shall contain a full identification of the system to which this document applies, including identification number(s), title(s), abbreviations(s), version number(s), and release numbers.

## 1.2 System Overview

This subsection shall briefly state the purpose of the system to which this document applies. It shall also summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

#### 2 REFERENCES

## 2.1 Standard References

List all government, ISO, industry, enterprise/agency/division/department, project, and other directive documents applicable to the preparation of the design document and its contents.

## 2.2 Project References

List the number, title, revision, and date of all documents referenced within this document. This subsection shall also identify the source for all documents not generally available.

## 3 DEFINITION, ABBREVIATIONS, AND ACRONYMS

List all terms and abbreviations, and the definitions used in this document or reference the document that contains the definition appropriate for this document. Include a table or list that shows the construction of each acronym, alphabetically, used in this document.

## 4 TOOLS, TECHNIQUES, AND METHODS

List and describe the tools, techniques, and methods used. Provide an overview of how to make changes to the tools, techniques, and methods; validate the changes; prepare new releases; install new releases; and validate the installation.

## 5 TRAINING

List the training needs for system maintenance.

## **6 ROLES AND RESPONSIBLITIES**

List the maintenance roles for each group of maintenance personnel, and describe the responsibilities of each role.

## 7. MAINTENANCE ITEM DESCRIPTIONS

This section provides a complete description of all maintenance requirements, system build descriptions, system failure modes and repair procedures, periodic maintenance requirements, and maintenance procedures. All system requirements shall trace to some item/operation in this section before the SMP is considered complete.

## 7.1 Maintenance Requirements

This section provides a detailed description of all identified maintenance requirements, and the roles and responsibilities identified.

## 7.1.1 Maintenance Item

Each maintenance item, including routine activities, shall be discussed in a section of its own.

## 7.1.2 Maintenance Item Description

The item description shall at a minimum include: name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resource requirements (personnel), processing, and data. (Naming conventions shall be consistent with Documentation Plan.) List and describe the maintenance items. Provide an overview of how to make changes to the item, validate the changes, prepare new releases, install new releases, and validate the installation.

## 7.1.3 Maintenance Requirements Traceability

The system requirements, which are satisfied by this maintenance item, shall be listed. Any requirements, which are only partially satisfied, shall be discussed and the portion of the requirement satisfied shall be delineated.

## 7.2 System Setup and Configuration Description

This section shall contain narrative, charts and diagrams describing how the system is built. The description shall provide enough detail to provide system-partitioning information to support the maintenance of the system. It shall include both software and hardware configurations.

## 7.3 System Installation Procedures

This section shall contain a narrative describing the requirements for installing new releases and the roles and responsibilities for installing them. The contractor may refer to other plans such as the Implementation Plan.

## 7.3.1 Hardware Server/Equipment

This section shall contain the hardware installation requirements.

#### 7.3.2 Software

This section shall describe the software necessary for installation of new releases.

### 7.4.0 CUTOVER-TO-OPERATIONS

This section shall describe any special cutover or operational procedures specific to implementing new releases of software for the PLM systems during the maintenance and operations phase. The contractor may refer to other plans such as the Implementation Plan.

## 7.4.1 Hardware Server/Equipment

This section shall describe the procedures needed to perform a Cutover-To-Operations relating to hardware/equipment requirements. This is for the purpose of implementing software or system releases during the maintenance and operations phase of the project.

#### 7.4.2 Functions

This section shall describe the procedures needed to perform a Cutover-To-Operations relating to software functions and functional requirements. This is for the purpose of implementing software or system releases during the maintenance and operations phase of the project.

#### 7.5 PERFORMANCE

Describe the procedures to monitor system and network performance before and after software or system releases during the maintenance and operations phase of the project.

Identify what to look for and monitor to ensure the system is running at specifications in the maintenance and operations phase of the project.

#### 7.6 PROBLEM TRIGGERS AND RISK AREAS

Identify what may trigger a problem. Identify specific risk areas. The contractor may refer to the other plans such as the Risk Management Plan.

## 7.7 SYSTEM FAILURES

This section shall contain narrative describing system failure reporting, modes, and fault correction procedures associated with system failures.

## 7.7.1 System Failure Mode

Each system failure mode shall be discussed in a section of its own.

#### 7.7.2 Failure Detection

This section shall include all procedures by which the existence of failure is recorded. This section shall cover failure name, type, and characteristics. (Naming conventions to be consistent with Documentation Plan, naming conventions and documentation formats.)

## 7.7.3 Failure Reporting

This section shall include the procedures used to inform the maintenance organization of any failure. It shall include the transmission of the failure reports from the customer to the maintenance organization and the entry of these reports into a failure tracking system.

## 7.7.4 Failure Tracking

This section shall consist of the procedures used to make sure that the failure is assigned for analysis and fault detection.

## 7.7.5 Failure Troubleshooting Procedures

This section shall document the troubleshooting procedure required to isolate the problem, find the fault that caused the system failure, and the roles and responsibilities for carrying out the procedures.

## 7.7.6 Failure Repair Procedure

For each system failure, identify and document the repair procedures to correct the problem and bring the system back to full operational capability. A discussion of response time, roles/responsibilities, escalation processing, customer follow-up, testing and training, and the amount of down time allowed for failure before implementing Disaster Recovery Plans shall also be included. (Changes made to the system shall be governed by the Configuration Management Plan.)

## 7.7.6.1 Testing Corrections

Describe the method to be used for testing corrections (acceptance testing to be modified).

## 7.7.6.2 Regression Testing

Describe the activities involved with testing the modified software to ensure no new faults have been placed into the modified software or production system.

## 7.7.7 Failure Maintenance Requirement Traceability

The maintenance requirements, which are satisfied by this system failure item, shall be listed in detail. Any requirements, which are only partially satisfied, shall be discussed and the portion of the requirement satisfied shall be clearly delineated.

## 7.7.8 Re-release Procedures

Describe the procedures to: create new versions of the product, validate the changes, prepare new releases and install the new releases. (Configuration Management requirements must be satisfied prior to re-release).

## 7.8 ROUTINE MAINTENANCE

This section shall describe needed routine maintenance to the system.

## 7.8.1 Maintenance Procedures

Document all procedures that support the maintenance requirement. Also include all maintenance requirements associated with contractor/support contracts. If necessary, the document section may reference a separate CDCR procedure manual (e.g. Database Administrator Manual, Security Administrator Manual, Application Programmer's Reference).

## 7.9 PERIODIC MAINTENANCE

This section provides a description of all periodic maintenance requirements

#### 7.9.1 Periodic Maintenance Item

Each periodic maintenance item shall be discussed in a section of its own.

## 7.9.1.1 Periodic Maintenance Item Description

The periodic maintenance item discussion shall cover; name, type, characteristics, purpose, function, subordinates, dependencies, interfaces, security issues (personnel, data), resources, processing, testing, and data.

## 7.9.2 Periodic Maintenance Requirements Traceability

The system requirements, which are satisfied by this periodic maintenance item, shall be listed. Any requirements, which are only partially satisfied, shall be discussed and the portion of the requirement satisfied shall be delineated.

## 7.9.3 Periodic Maintenance Procedures

Document all procedures that support the periodic maintenance requirement. If necessary, the document section may reference a separate CDCR procedure manual (e.g. Database Administrator Manual, Security Administrator Manual, Application Programmer's Reference). Include procedures to validate, prepare and install modified releases.

## 7.10 REPORTING REQUIREMENTS

This section shall describe needed routine maintenance to the system.

## 7.10.1 Maintenance Reporting Procedures

Document all procedures that document the maintenance process. Describe the medium or media used to record and store the reports

## 7.10.2 Maintenance Reporting Records

Document all collection, maintenance, and retention procedures for reporting records.

#### 7.11 OUTSIDE MAINTENANCE SUPPORT

This section provides a description of all outside maintenance support information.

#### **7.11.1** External

Describe any contractor provided maintenance support.

## 7.11.2 Warranty Information

Describe any warranty information, the duration, any needed renewal process.

## 7.11.3 External Maintenance Contract

Describe any maintenance contracts associated with the system. Describe the contractor's contact person for the maintenance contract. Describe any State personnel associated with the maintenance contract.

## Additional Appendices

Appendices shall be labeled alphabetically. Appendices may be used to contain referenced information or information which might otherwise have rendered the document less readable if placed in the main body. Appendices shall also be used for information that needs to be bound separately for security reasons. The contractor shall use as many appendices as is reasonable and makes sense for the deliverable.

System:	Item Number:
Parole LEADS Modernization Project	A402b

#### Title:

Systems Operations Guide

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids:

A402b = D-05, D-06, IS-01, IS-04, IS-05, TRG-01, TRG-02, IP-02

#### Date of Submission:

Draft submission due ten (10) State business days after completion of Development Phase.

Final submission is due seventeen (17) State business days after completion of Development Phase and prior to start of operational use.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days and prior to start of operational use.

Updates shall be supplied as needed following revisions.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

System:	Item Number:
Parole LEADS Modernization Project	A402b
71.1	

#### Title:

Systems Operations Guide

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The Systems Operation Guide shall be a step-by-step manual for PLM system operators. The objective of the guide is to provide concise, easy to understand procedures for the performance of system operation-type functions. The guide shall employ standard documentation techniques, including charts, tables, screen prints, graphics, report examples, and icons.

Specifically, the Systems Operation Guide shall address the following: Scope:

*Identification -* Identify the system including any identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

**System Overview -** State the purpose of the system. Explain what the system will do and what it will not do. Describe all relevant benefits, objectives, and goals.

**Document Overview -** Describe the contents of the document, explain its organization, and describe any security or confidentiality considerations for the document.

Definitions -

**Referenced Documents -** Provide a complete list of other documents referenced. Include the title, date, and publisher.

**Definitions and Acronyms** - Define acronyms and terms that are contained in the plan.

**Roles and Responsibilities -** Define all support groups required for systems operations and their associated roles and responsibilities.

**Tools, Techniques, and Special Warnings -** Provide tools used, techniques used, and any special warnings about the tools, techniques, or the system.

*Operations Procedure Overview -* Identify each operations procedure and describe each one. Include system outputs and locations.

Operations Procedures - Include the following for each procedure identified:

System Preparation and set up procedure (start up and shut down).

Criteria and Measurements for Successful Operation.

Standard Operating Procedures by User Type.

Monitoring procedures during operation (to include performance standards).

Off-line routing procedures.

Daily operating procedures.

System:Item Number:Parole LEADS Modernization ProjectA402b

Title:

Systems Operations Guide

Standard safety and security

On-demand procedures (response to user requests)

Triggers and Risks

Maximum required response times for issue resolution

Failure and Recovery Procedures, including automatic

**Emergency procedures** 

Diagnostic Features

**Escalation List** 

Maintenance of documentation

Communications: Describe all communications between the computer system and the operator.

Communications Event Name

Communication Event Description

Time sequencing of extended conversations

Error Messages: This section shall list all error messages.

Error Message Name

**Error Message Description** 

Error Meaning (What does the error message mean to the system)

Operator's Corrective Action: This section shall provide the means by which to resolve errors. Provide any known system problems and describe the procedure(s) used to identify errors, resolve the error and document the error resolution.

- 1. <u>Appendix</u> (If applicable): Appendices may be used to provide information published separately for convenience in document maintenance. As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendices shall be lettered and ordered alphabetically.
- 2. <u>Definitions</u>: All key terms, acronyms and abbreviations used within the document shall be listed and defined.
- 3. Glossary of Terms
- 4. Index
- 5. Reference
- 6. Record collection, maintenance, retention,
- Outside support.

System:	Item Number:
Parole LEADS Modernization Project	A402c

#### Title:

Help Desk Guide

## Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids:

A402c = D-05, IS-01, IS-04, TRG-01, TRG-02, HDS-07

#### Date of Submission:

Draft Help Desk Guide is due twenty (20) State business days after development phase completion

Final Help Desk Guide is due sixty-six (66) calendar days prior to commencement of implementation

Updates shall be supplied as needed following revisions.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## A500 – Release Notes

System:	Item Number:
Parole LEADS Modernization Project	A500

## Title:

Release Notes

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, DA-01, TRG-01, TRG-02

## Date of Submission:

(as release occurs)

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## **Preparation Instructions:**

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

The contractor shall supply release notes for each release of software. The content of these notes is detailed below. The release notes shall contain:

- An inventory of release components listing, at a minimum, each file contained in the release with a name, size and/or version description of each file. Releases in which multiple files are compressed into fewer files for release convenience shall be decompressed and installed. Each file that exists before or after decompression, or during or after installation shall be so described.
- 2. A matrix correlating the release with a requirement, an enhancement and/or reported problem. This matrix shall contain:
  - a. The functional area where the change occurred. Every component listed in the inventory of major release components shall be included.
  - b. A documented reference to every requirement and the supporting document that defines it, in the release, enhancement and/or reported problem the current release is meant to satisfy.
  - c. A brief description of the problems/issues for each component in the release.

System:	Item Number:
Parole LEADS Modernization Project	A500

## Title:

#### Release Notes

- d. A reference to a full set of fully functional test cases for each requirement or problem solution component in the release.
- e. Exception notes for each component, if applicable.
- f. A reference to the user (or other) required documentation for each satisfied enhancement and/or problem.
- g. A brief description of changes necessitated or features added due to this release.
- 3. A known issues list detailing all known problems anywhere in the system at the time of release. This list shall carry over from any previous releases those items promised but not delivered, or problems introduced by the current release. For each issue, the known issue list shall cover, at a minimum:
  - a. Problem identifier
  - b. Problem Name (a brief descriptor)
  - c. Problem Description (detailed, including what the user will notice as a result of the problem)
  - d. Problem Priority
  - e. Problem Effect such as damage files, system freeze, etc.
  - f. Problem re-creation description, if known
  - g. Problem Component(s) location or presumed location
  - h. Name of Assignee for problem fix
  - i. Estimated Date of fix
- 4. New documents, updates or re-releases of current documents covering all documents affected by this release.
- 5. Installation requirements, instructions, documentation, time estimates (time to install), contractor personnel responsible for support of installation.
- A complete set of test cases for each enhancement and/or reported problem demonstrating the validity of the implementation for each component it effects. These test cases shall be uniquely identified and referenced in the release matrix as describe above.

Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## A600 - Software Development/Support Tools Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A600

#### Title:

Software Development/Support Tools

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: DA-01, IS-06

#### Date of Submission:

Eleven (11) State business days prior to production implementation

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

## **Preparation Instructions:**

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

If a Commercial Off The Shelf (COTS) product being proposed meets all business requirements and requires 'no modification to source code' then this template is not required. However, if any processes or applications need to be created in order to support the COTS product, the software development used to create these processes must be documented in this template.

For all development/support tools (or processes), the contractor shall provide an electronic copy of source code, executable code, and user guide or other description of how to use the tool or process.

## A601 - Commercially Obtained Software Media and Licenses

System:	Item Number:
Parole LEADS Modernization Project	A601

## Title:

Commercially Obtained Software Media and Licenses

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: DA-01, IS-06

## Date of Submission:

Deliver a complete set of software media and licenses needed to maintain the system upon initialization for operational use.

Deliver additional maintenance software media and licenses as needed for CDCR maintenance.

Deliver remaining software licenses five (5) State business days before the completion of the contract.

### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

#### Approval:

Prior written approval of the materials is required by the PLM Project Managers.

#### Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

Commercially Obtained Software Media and Licenses

Provide materials received from Contractor.

## A700 - Security Plan Coversheet

	Item Number:
Parole LEADS Modernization Project	A700

## Title:

Security Plan

#### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: D-05, IS-06

#### Date of Submission:

Draft submission due seven (7) State business days prior to the Requirements Review meeting.

Final submission due ten (10) State business days after the Requirements Review meeting.

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates: The analysis shall be updated to track all subsequent requirements related documents (e.g. design documents, test plans, approved change proposals, final test results) and changes to requirements to arrive at the final, agreed upon requirement set. The analysis shall be maintained current to within ten (10) calendar days of any change to requirements specifications (unless otherwise specified and agreed) and to within ten (10) calendar days of any requirements related documents.

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

### Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

## A700 - Security Plan Template

## 1.0 SCOPE

## 2.0 TERMS AND DEFINITIONS

## 3.0 RISK ASSESSMENT AND TREATMENT

- 3.1. Assessing Security Risks
- 3.2. Treating Security Risks

## 4.0 SECURITY POLICY

4.1. Information Security Policy

## 5.0 ORGANIZATION OF INFORMATION SECURITY

- 5.1. Internal Organization
- 5.2. External Parties

## 6.0 ASSET MANAGEMENT

- 6.1. Responsibility for Assets
- 6.2. Classification Guidelines

## 7.0 HUMAN RESOURCES SECURITY

- 7.1. Prior to Employment
- 7.2. During Employment
- 7.3. Termination or Change of Employment

## 8.0 PHYSICAL AND ENVIRONMENTAL SECURITY

- 8.1. Secure Areas
- 8.2. Equipment Security

### 8.3. General Controls

## 9.0 COMMUNICATIONS AND OPERATIONS MANAGEMENT

- 9.1. Operational Procedures and Responsibilities
- 9.2. Third Party Service Delivery Management
- 9.3. System Planning and Acceptance
- 9.4. Protection Against Malicious and Mobile Code
- 9.5. Back-up
- 9.6. Network Security Management
- 9.7. Media Handling
- 9.8. Exchange of Information
- 9.9. Electronic Commerce Services (if appropriate)
- 9.10. Monitoring

## 10.0 ACCESS CONTROL

- 10.1. Business Requirement for Access Control
- 10.2. User Access Management
- 10.3. User Responsibilities
- 10.4. Network Access Control
- 10.5. Operating System Access Control
- 10.6. Application and Information Access Control
  - 10.6.1. Database Access Control
- 10.7. Monitoring System Access and Use
- 10.8. Mobile Computing and Teleworking

# 11.0 INFORMATION SYSTEMS ACQUISITION, DEVELOPMENT AND MAINTENANCE

- 11.1. Security Requirements of Information Systems.
- 11.2. Correct Processing in Applications

- 11.3. Cryptographic Controls
- 11.4. Security of System Files
- 11.5. Security in Development and Support Processes
- 11.6. Technical Vulnerability Management

## 12.0 INFORMATION SECURITY INCIDENT MANAGEMENT

- 12.1. Reporting Information Security Events and Weaknesses
- 12.2. Management of Information Security Incidents and Improvements

## 13.0 BUSINESS CONTINUITY MANAGEMENT

13.1. Information Security Aspects of Business Continuity Management

## 14.0 COMPLIANCE

- 14.1. Compliance with Legal Requirements
- 14.2. Compliance with Security Policies and Standards, and Technical Compliance
- 14.3. System Audit Considerations

## A800 -Knowledge Transfer Plan Coversheet

System:	Item Number:
Parole LEADS Modernization Project	A800

## Title:

Knowledge Transfer Plan

### Reference:

Refer to the attached Deliverables and Services Response Matrix (Exhibit VI-C). The template following this coversheet is for the contractor to document information for requirement ids: IS-01, IS-04, IS-05, TRG-01, TRG-02, IP-02

#### Date of Submission:

Three (3) consecutive months after the Contractor starts work

If approval of deliverable is contingent on incorporation of changes specified by CDCR, an updated submission incorporating the changes shall be provided within ten (10) calendar days.

Updates: The plan shall be updated to track all subsequent changes to management of the project. The plan shall be maintained current to within twenty-two (22) calendar days of any change (unless otherwise specified and agreed.)

#### Distribution:

Electronic copy in MS Office format and hard copy to all attendees

## Approval:

Prior written approval of the materials is required by the PLM Project Managers.

## Comment:

## Preparation Instructions:

The deliverable(s) shall include, but are not limited too, the contents of the Coversheet and Template, or equivalent as determined by the PLM Project Managers. Providing less information than required in the template or any exceptions shall not be allowed without prior approval from the PLM Project Managers.

System:	Item Number:
Parole LEADS Modernization Project	A800
Title:	
Knowledge Transfer Plan	
Minimum Content Required:	
The Plan shall include the following:	
Knowledge Transfer Goals/Objectives	
Knowledge Transfer Approach	
- Pre-assessment	
<ul><li>Mid-assessment</li><li>Post-assessment</li></ul>	
1 oct doccomont	
Roles and Tasks to be transferred	
Current Expert	
Trainer	
Plan/Schedule to transfer knowledge	

Validation of knowledge transfer at each phase of assessment.

## <u>A800 – Knowledge Transfer Template</u>

The A800 Knowledge Transfer Plan shall be supported by other documents or artifacts which contain the specifics of the information which is being transferred.

## 1.0 SCOPE

## 2.0 TERMS AND DEFINITIONS

### 3.0 RISK AREAS & MITIGATION STRATEGY

- 3.1. Business Risks (Overall business impact)
- 3.2. Process Risks (Specific to domain of system)
- 3.3. Technical Risks (Architecture, Design, Code)
- 3.4. Operational Risks (Including Disaster Recovery & Business Continuity)

## 4.0 STAKEHOLDERS AND ROLES

- 4.1. Internal
- 4.2. External

## **5.0 BUSINESS KNOWLEDGE TRANSFER**

- 5.1. Client to Systems Implementer
  - 5.1.1. Topic List
  - 5.1.2. Plan/Schedule
  - 5.1.3. *Artifacts*
  - 5.1.4. Validation Exercises
  - 5.1.5. Lessons Learned
  - 5.1.6. Approvals

## 5.2. Systems Implementer to Client

5.2.1. Topic List

5.2.2.	Plan/Schedule
5.2.3.	Artifacts
5.2.4.	Validation Exercises
5.2.5.	Lessons Learned
5.2.6.	Approvals

## **6.0 PROCESS KNOWLEDGE TRANSFER**

## 6.1. Client to Systems Implementer

- 6.1.1. Topic List
  6.1.2. Plan/Schedule
  6.1.3. Artifacts
  6.1.4. Validation Exercises
  6.1.5. Lessons Learned
- 6.1.6. *Approvals*

## 6.2. Systems Implementer to Client

6.2.1. Topic List
6.2.2. Plan/Schedule
6.2.3. Artifacts
6.2.4. Validation Exercises
6.2.5. Lessons Learned
6.2.6. Approvals

## 7.0 TECHNICAL KNOWLEDGE TRANSFER

## 7.1. Client to Systems Implementer

7.1.1.	Topic List
7.1.2.	Plan/Schedule
7.1.3.	Artifacts
7.1.4.	Validation Exercises
7.1.5.	Lessons Learned

## 7.1.6. Approvals

## 7.2. Systems Implementer to Client

- 7.2.1. Topic List
- 7.2.2. Plan/Schedule
- 7.2.3. Artifacts
- 7.2.4. Validation Exercises
- 7.2.5. Lessons Learned
- 7.2.6. Approvals

## **8.0 OPERATIONAL KNOWLEDGE TRANSFER**

## 8.1. Client to Systems Implementer

- 8.1.1. Topic List
- 8.1.2. Plan/Schedule
- 8.1.3. Artifacts
- 8.1.4. Validation Exercises
- 8.1.5. Lessons Learned
- 8.1.6. *Approvals*

## 8.2. Systems Implementer to Client

- 8.2.1. Topic List
- 8.2.2. Plan/Schedule
- 8.2.3. *Artifacts*
- 8.2.4. Validation Exercises
- 8.2.5. Lessons Learned
- 8.2.6. *Approvals*

## 9.0TRANSFER CLOSURE

- 9.1. Archive Findings
- 9.2. Modify Supporting Processes, if appropriate
- 9.3. Knowledge Transfer Complete Release